Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

July 24, 1961

DETERGENT ALKYLATE: MARKET IN JEOPARDY?

OPD SPECIAL 'DEPTH' REPORT
PAGE THREE

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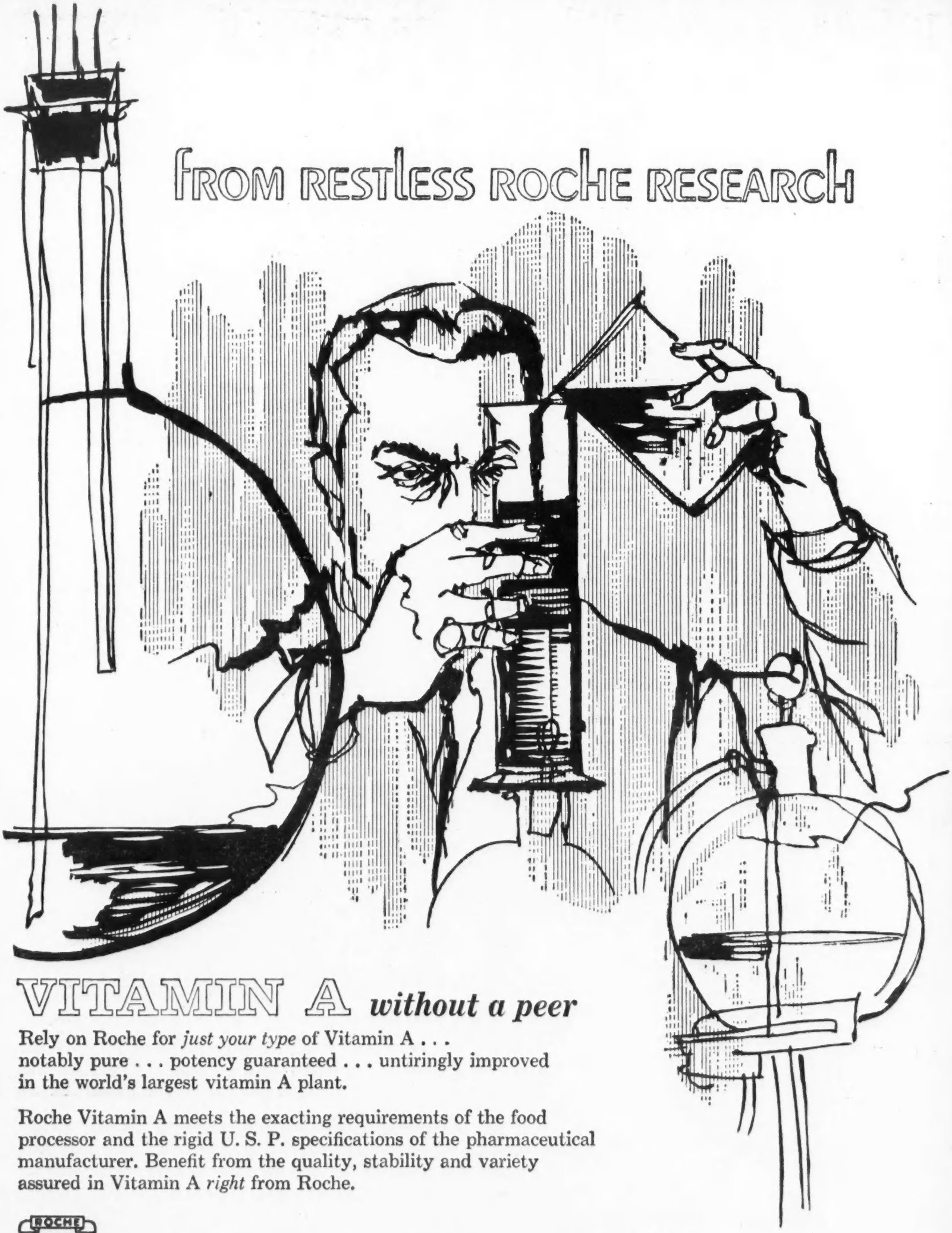

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Oil, Paint and Drug Reporter

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DETERGENT ALKYLATE MAKERS
Witfield's New Unit Hikes US Capacity

Allied	Buffalo, N. Y.	10 million lbs./yr.
Atlantic Refining	Philadelphia	50 million lbs./yr.
Atlantic Refining	Port Arthur, Tex.	25 million lbs./yr.
California Chemical	Richmond, Calif.	250 million lbs./yr.
Continental Oil	Baltimore, Md.	100 million lbs./yr.
Monsanto	E. St. Louis, Ill.	65 million lbs./yr.
Witfield Chemical*	Los Angeles	30 million lbs./yr.
Total		530 million lbs./yr.

*On stream fourth quarter of 1961.

Kefauver Drug Control Bill Splits AMA's Hierarchy Down the Middle

A split in the ranks of the American Medical Association's hierarchy over the Kefauver drug control bill has become evident. Medical profession witnesses—some from AMA's Council on Drugs—who paraded before the Kefauver committee last week broke sharply with the position of top AMA officials earlier (OPD, 7/10/61) that new laws are unnecessary and that the profession is perfectly capable of doing its own drug evaluation to keep worthless products off the market.

The testimony came during the second series of hearings on the Kefauver-Celler drug industry antitrust bill (S 1552) as chairman Estes Kefauver of Tennessee and Dr. Leonard Larson, head of the AMA, feuded over whether revenues of drug company advertisers in the AMA *Journal* have any influence on the ability of the AMA to view drug values objectively.

Speaking before the National Press Club, Dr. Larson blasted the senator for making an "unwarranted slur" on the medical profession and called upon Mr. Kefauver to expunge the charge from the record.

The senator's reply was that if he had made an untrue charge, he would take the action requested "but what is involved here," he said, "is not a charge but merely a record of incontrovertible facts which speak for themselves."

Testimony damaging to the official

—Continued on page 53

MARKETING VICE-PRESIDENT: Frank J. Ronca, named marketing vice-president for the nitrogen products division of W. R. Grace & Co., with headquarters in New York.

Phosphates: Industry Might Dive for Them

Secretary of the Interior Stewart L. Udall would like to see the phosphate industry take a dive—figuratively, that is—by going after the phosphorus-rich pebbles and boulders lying on the bottom of the sea off the coast of Southern California.

He has invited the industry to get its feet wet by suggesting areas on the Pacific Coast outer continental shelf that firms would like to see opened up for underseas phosphate mining.

It will mark the first offshore mineral

—Continued on page 37

Drug Non-Military Buying To Be Centralized in the VA

Government purchases of ethical drugs for its civilian agencies will be centralized in the Veterans Administration beginning November 15 under an arrangement just completed by the agency with General Services Administration.

It is estimated that this will increase the VA's drug buying by an additional $15 million annually to a total of around $40 million.

Drug purchases of the military agencies, which run to several times those of the VA, will continue to be made by the Military Medical Supply Agency under the directon of the Navy.

It is the hope of the planners that the larger-volume purchases VA will be able to make under the new arrangement will result in lower drug prices.

Present policies of VA of making purchases by trade names and generic names will continue as well as the purchasing of drugs from foreign sources when the Buy American act is applicable.

Detergent Alkylate Producers Find Prospects Cloudy Indeed, Both at Present and in Future

US alkyl benzene output is slated to reach 533 million pounds a year in 1965, not too spectacular compared with 1960 output of 493 million pounds.

OPD 'Depth' Report

But so many problems are cropping up that it's moot whether even this modest goal will be reached four years hence. It's fairly safe to predict a 2-percent-per-year rise in consumption based largely on population growth and expansion of industrial uses. On the other hand, even this small increase is jeopardized by world market developments over the last year or so. Some posers:

• At the present rate of output, dodecylbenzene production in the US might decline this year for the third year in a row below 1958 levels, when production reached a high of 495 million pounds.

(It must be noted that there's strong criticism of Tariff Commission figures by the industry. Why is there such a large discrepancy, year after year, between production and sales? they want to know. In 1960, for instance, output was 492 million pounds; sales, 420 million pounds.)

Alkyl Benzene Exports

1965	*55.0 million lbs.
1960	80.7 million lbs.
1959	65.6 million lbs.
1958	71.6 million lbs.
1957	105.0 million lbs.

* Estimate. Source: Tariff Commission. Figures for 1957 include some coaltar detergent alkylate intermediates.

• Foreign detergent alkylate capacity is expected to rise by 104 million pounds by 1963, and, at the same time, US exports could decline sharply despite opening up of under-developed nations to consumer goods.

• Trend in detergents is continuing from granular to liquid and from high-sudsing light-duty to low-sudsing heavy-duty products.

This already has meant a percentage fall-off of demand for alkyl benzene sulfonate. Granular detergents are roughly 25 percent ABS, whereas liquid detergents are only about 12 percent ABS.

• The synthetic detergent market is considered mature. There are no areas,

—Continued on page 9

ALKYL BENZENE OUTPUT IN US

1965	*533 million lbs.
1960	492 million lbs.
1959	494 million lbs.
1958	495 million lbs.
1957	455 million lbs.
1956	486 million lbs.
1955	389 million lbs.
1954	358 million lbs.

*Estimate

Source: Tariff Commission

DMT Venture Teams Amoco, Dutch Firm

Amoco Chemicals Corporation has just embarked on a joint dimethyl terephthalate (DMT) venture in the Netherlands. Through its overseas affiliate, Amoco International SA, the company has teamed up with Alegemene Kunstzijde Unie NV, a producer of polyester materials.

The two partners have organized NV Petrochemie AKU-Amoco, which will build a dimethyl terephthalate plant at Delfzijl.

The plant will use a reportedly unique

—Continued on page 43

Styrene Facility of Shell Reaches 210 Million Lbs.

Shell Chemical Company has completed expansion of its styrene production facilities at Torrance, Calif., raising the plant's capacity to 210 million pounds a year. Shell has been in the styrene market since 1955, when it acquired the synthetic rubber complex at Torrance from the US government.

The styrene facilities, which are part of the integrated operation, had a rated capacity of 125 million pounds a year in 1955. Completion of the new program results in a total expansion of nearly 70 percent since the plant has been in private operation.

SONNEBORN'S NEW PRESIDENT: William Wishnick, elected president and chief executive officer of Sonneborn Chemical & Refining Corporation, New York, a wholly-owned subsidiary of Witco Chemical Company. He succeeds Rudolf G. Sonneborn who has been elevated to the subsidiary's board chairmanship.

USI Sells dl-Methionine Business in Streamlining Move

With divestiture of its dl-methionine business, US Industrial Chemicals Company has taken another step away from chemical specialties.

Taking over USI's pharmaceutical and feed-grade dl-methionine line last week was J. W. Brampton Company, of Farmingdale, N. Y., an old-time custom manufacturer of drugs, botanicals and flavors.

As far as USI is concerned the sale is but one step in an unloading process that is freeing the company to concentrate all its efforts on the big volume chemicals—ethyl alcohol, plastics, sulfuric acid and other heavies.

Still on USI's chemical specialties roster: acetyl methionine and ethyl carbamate.

First to go several years back were such animal feed supplements as "Curbay" and "Vacatone" and riboflavin products. Next USI sold its "Arylalyde" producing plant to FMC Corporation, and earlier this year gave FMC the marketing rights.

On June 1, USI turned over all marketing of "Morea" liquid feed supplements to Feed Service Corporation, Crete, Neb.

Previously, USI handled distribution in the east and far west. However, the company is continuing to produce the materials at its plants in Tuscola, Ill., and Anaheim, Calif.

Then came last week's sale of the dl-methionine line.

J. W. Brampton says its research and sales staff are ready to offer facilities for developing new uses and improving established products based on dl-methionine. The company will work along the full gamut of applications—from pharmaceuticals to animal and human food supplements.

GSA Seeking Congress Okay For Sale of Tanning Materials

Legislation that would permit General Services Administration to dispose of limited quantities of tanning materials in the national stockpile, together with other unwanted materials in small amounts, is being drawn up for submission to congress. GSA has already declared the items surplus to needs of the stoc pile, but because of the terms of the law cannot dispose of them without the express consent of congress. The legislation is being drawn up at the suggestion of the house armed services committee.

The tanning materials GSA would like to dispose of consist of 2,100 long tons of quebracho extract, 650 long tons of chestnut extract and a like quantity of wattle extract. GSA announced on March 8 that these materials were surplus to stockpile needs.

Other Materials Put on Block

In addition, the agency is proposing to dispose of 28,816 short tons of celestite, ninety-six short tons of subgrade nickel ingot, four short tons of sintered nickel powder, nine short tons of cobalt rondel, 10 million pounds of sisal and 7.5 million pounds of abaca.

Under the terms of the national stockpile law, except for perishable products, a six-month waiting period must elapse between the time a determination is made that a material is surplus to stockpile needs and the time that it can be disposed of.

But even then it cannot be sold by the agency unless express approval has been given by congress. Perishable products can be sold in less than six months without congressional approval, and articles declared obsolete to stockpile needs can be sold at the end of six months in the absence of a congressional stop-order.

In the present instance, the articles have not been declared "obsolete," but simply "surplus," and thus can be sold only upon express approval of congress.

And even then the six-month period must elapse before they can be sold. Thus, in the case of the tanning materials, no sales can be made before September 8 even if congress should approve the sale tomorrow.

Cyanamid, Walker Have A Smog Control Muffler

American Cyanamid Company and Walker Manufacturing Company are readying a joint entry for California's motor vehicle smog control race.

Culminating joint development work since early 1960, the two firms plan to submit a catalyst muffler device for testing by the California Motor Vehicle Department.

A recent state law stipulates that all new automobiles must be equipped with such a device one year following approval by the department's Pollution Control Board. Walker has been working with automobile manufacturers, supplying them with exhaust systems.

Dutch Fertilizer Plans Nurtured by Gas Find

Dutch fertilizer producers reportedly are mulling over a consolidation of recent expansion projects based on the new natural gas discovery in the northern part of Holland.

Hoogovens (Holland's biggest steel company), Royal Dutch Salt Industry and BPM (a subsidiary of the Royal Dutch/Shell Group) are planning a joint ammonia fertilizer plant to capitalize on the natural gas.

BPM and Hoogovens already own jointly Makog Fertilizer whose production is based on Hoogovens cokeoven gas.

State Mines, another major Dutch com-

—Continued on page 38

'Roskydal' Polyester Resins Will Be Produced in the US

Arrangements have been made for domestic manufacture of "Roskydal" polyester resins. Heretofore imported, the resins will now be produced by Verona Chemical Corporation at a new plant in Newark, N. J., and distributed exclusively by Naftone, Inc., New York.

As a result of local production, a sharp cut in prices is expected, Naftone says.

"Roskydal" is the trade name of a group of unsaturated, wax-free, air-curing polyesters adaptable to either clear or pigmented chemical coatings for wood, masonite, chipboard, masonry or metal surfaces.

Ultraviolet Absorber Price Reduced by Geigy in Britain

The British unit of the Swiss firm, J. R. Geigy SA, has cut the price of its ultraviolet absorber, "Tinuvin P." In large quantities, the new price is $6.72 a pound.

Geigy is also introducing a new ultraviolet absorber, "Tinuvin 326," which is claimed to absorb at longer wavelengths than the present compound.

Both "Tinuvins" are substituted benzotriazole chemicals.

Benzoyl Formic Compound Is Put on Market by Penick

Benzoyl formic acid (phenyl glyoxylic acid) and methyl benzoyl formate are now available in development quantities from S. B. Penick & Co., New York. These bifunctional compounds should be useful as intermediates for pharmaceuticals, Penick says.

The Week's Price Changes

This Week's Sole Price Advance Is Yellow Carnauba Wax. Corn Oil, Greases, Olive Oil, Tallow Are Reduced.

Prices Advanced

Carnauba wax, yellow, 3c. per lb. (p. 54).

Prices Reduced

Carnauba wax, Ceara, No. 3, crude, 2c. per lb. (p. 54).
Parnahyba, 2c. per lb.
Coconut oil, crude, ¼c. per lb. (p. 54).
Corn oil, crude, ¼c. per lb. (p. 54).
Refd., ½c. per lb.
Cottonseed oil, crude, ½c. per lb. (p. 54).
Refd., ½c. per lb. (p. 54).
Greases, ½c. per lb. (p. 54).
Linseed meal, extracted, $1 per ton (p. 54).
expeller, $2 per ton.
Olive oil, spot, 5c. per gal. (p. 54).
Peanut oil, crude, ½c. per lb. (p. 54).
Refd., ½c. per lb. (p. 54).
Soybean meal, $1 per ton (p. 54).
Soybean oil, crude, ¾c. per lb. (p. 54).
Refd., ¾c. per lb.
Tallow, ½c. per lb. (p. 54).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER's relative record of prices of chemicals and related materials is currently as follows:

July 21, 1961	July 14, 1961	July 22, 1960
113.91	114.00	109.47

Strep Discoverer Scores Again

Dr. Selman A. Waksman, prime mover in the discovery of streptomycin back in 1943, has scored again—this time with an anti-fungal antibiotic. Called candicidin, the new drug has been found effective against fungus infections of both humans and plants. It was co-discovered by Dr. Waksman and Dr. Hubert A. Lechevalier, who earlier worked together to develop neomycin, another important antibiotic. Both are associated with the Rutgers University Institute of Microbiology.

As a patent (No. 2.992,162) was issued on the drug last week, Rutgers disclosed that it has licensed S. B. Penick & Co., of New York, to manufacture candicidin. For gynecological use, it will be distributed by Julius Schmid, Inc., of New York, under the trade name "Candeptin."

Acts Against Fungi, Not Bacteria

Candicidin, produced by a culture of micro-organisms belonging to the actinomycetes, was isolated from a sample of cow manure in 1948. It acts against fungi but not against bacteria.

Its name has been derived from its action against candida albicans, a yeast-like fungus that troubles humans. In plants, the antibiotic may prove useful against the Dutch elm disease and other infections. Tests have shown that it reduces powdery mildew on young bean plants, according to Rutgers.

The patent covers candicidin and the

—Continued on page 45

Texas Gulf Names Guess To Head Up Potash Sales

Bryan W. Guess has been named head of sales for the new potash division of Texas Gulf Sulphur Company, New York.

The new division will mine the large potash deposit in southeast Utah, which Texas Gulf believes to be richer than any other known reserve in this country. With mine construction already well under way, production will begin late in 1962.

For the past three years, Mr. Guess has been assistant manager in TG's sulfur sales department. Previously he was associated for twelve years with Swift & Co.'s fertilizer division in marketing of superphosphates and fertilizers for farm use.

DIXON SALES MANAGER: Robert P. Bevan, appointed sales manager of Dixon Chemicals, Clifton, N. J.

'Amprol' Unit Expansion Is Slated by Merck & Co.

Merck & Co. has slated a further expansion of its "Amprol" coccidiostat facilities in Elkton, Va. Capacity will be increased 40 percent at a cost of $2 million. On-stream target for the added facilities is February, 1962.

The latest boost follows a 50 percent increase in capacity started early this year and scheduled for completion this month.

"Amprol" is mixed with poultry feed to treat and help prevent coccidiosis, a disease of major economic consequence to the poultry industry.

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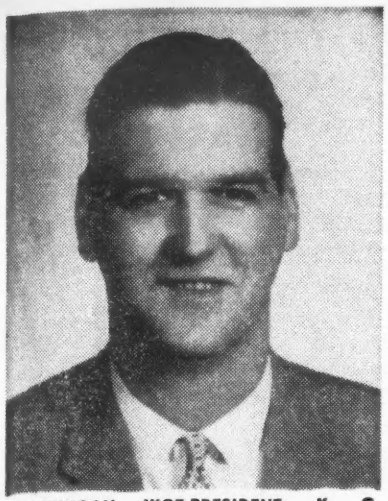

SHAWINIGAN VICE-PRESIDENT: K. C. Clarke, named a vice-president of Shawinigan Products Corporation, New York. He was formerly export sales manager of Shawinigan Chemicals, Ltd., Montreal, Canada, parent company of Shawinigan Products.

British American Eyes Foreign Sulfur Marts

With higher production of natural gas in western Canada, British American Oil Company, Ltd., will soon have enough byproduct sulfur on hand to justify an extension of its marketing areas.

Though limited to western US and Canada, sulfur sales so far have been satisfactory, and the company is more than satisfied with the prices received, an official said last week. He conceded, though, that these prices may not hold, owing to keen competition.

Addressing the New York Society of Security Analysts, E. D. Loughney, president, said that the company is now in a position to resolve its dilemma of having more sulfur than needed for nearby markets, but not enough to seek expanded coverage.

From 1.2 billion cubic feet per day in 1960, total sales of Canadian natural gas are expected to increase to over 1.6 billion cubic feet per day in 1961 and to an estimated 2.1 billion cubic feet in 1962. This will permit a comparable increase in sulfur production.

With the lower cost of volume production, Canadian sulfur should become competitive in overseas markets, and British

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Methyl Chloride Concern Formed by Ansul, Conoco

A new petrochemical company—Ancon Chemical Company—will produce the 60 million pounds of methyl chloride annually which Ansul Chemical Company and Continental Oil Company disclosed two months ago they were planning to make (OPD, 5/22/61).

Ancon, owned fifty-fifty by Ansul and Conoco, has awarded the construction contract on the $1 million facility at Lake Charles, La., to Blaw-Knox Company of Pittsburgh, Pa.

Work on the new facility is expected to start immediately with completion slated for early next year.

Methyl chloride produced by Ancon will be distributed exclusively by Ansul Chemical, which also operates a methyl chloride unit at Marinette, Wisc.

President of Ancon Chemical is Robert C. Hood, president of Ansul. Its chairman is E. E. Baker, general manager of the research and development and petrochemical departments of Conoco at Houston, Tex.

Hazardous Label Law Reprieve Of Another Six Months Granted To Chemical Producers by FDA

Chemical producers are getting a reprieve—until February 1—on the deadline for complying with the hazardous articles labeling law. Last week's Food & Drug Administration action was not entirely unexpected as it had long been apparent that neither the chemical industry nor the agency were prepared to cope with enforcement by August 1—the previously-set deadline. In fact, it is questionable whether even the general regulations will be ready in final form by that date.

To avoid any undue burdens on manufacturers and distributors of the thousands of household products which are being brought under FDA supervision for the first time, officials of the agency decided to make full use of the authority in the law to push the deadline back to its farthest limit.

Even the February 1st deadline may be relaxed if the agency follows up on the advice given by industry.

It has been suggested that FDA ask congress for authority to permit further extensions in hardship cases, especially if the general regulations in final form are delayed very much longer.

Compliance Stymied by FDA

The chemical industry's wishes to comply with the law have been stymied by the troubles FDA is having with the general regulations.

There is a wide schism between industry and FDA over how the law is to be interpreted as shown by the comments of chemical producers and others at the meeting with FDA last fortnight (OPD, 7/17/61).

FDA has proposed in its tentative draft of the regulations that the warning statements required to be included by law on the label must be enclosed in a square or rectangle bordered in a color in a strong contrast to the color of the label itself. The chemical industry has protested this requirement as unauthorized.

FDA is also reviewing these other industry complaints:

- That the standards for determining the degree of hazards are not in accordance with law.
- That FDA is erroneously broadening the definition of "containers suitable for household use."
- That the agency is seeking to extend the law to purchases and sales transactions, instead of limiting it to the use and handling of hazardous products.

It is expected that when the recommendations are issued in final form, they will carry out some of the suggestions made at the industry meeting.

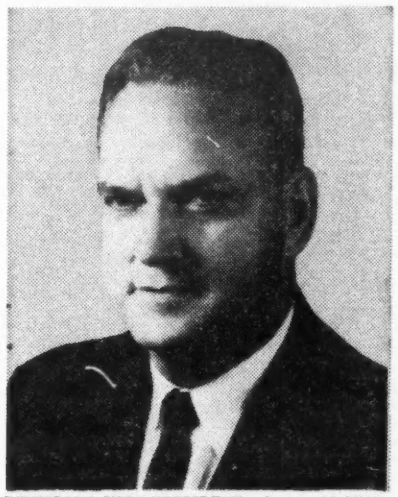
But, for the most part, FDA will stand by its original intent of enforcing the law "with the consumers' interest foremost in our minds."

Tenneco Aromatics Plant Starts Up at Chalmette, La.

Tenneco Oil Company has just made its debut in the petrochemicals business with start-up of an aromatics plant at Chalmette, La. The facility is turning out benzene, ethylbenzene, orthoxylene, mixed xylenes, toluene and heavy solvents.

Included are a 6,000-barrel-a-day catalytic reformer, a 2,200-barrel extraction plant and fractionation units capable of turning out 22 million pounds of orthoxylene and 20 million pounds of ethylbenzene annually.

The aromatics units are integrated with Tenneco Oil's crude oil refining operations at Chalmette. Headquartered in Houston, Tex., and operating another refinery at Dallas, Tenneco Oil is the producing, refining and marketing arm of Tennessee Gas Transmission Company.



PENNSALT VICE-PRESIDENT: James McWhirter, general manager of its industrial chemicals division, who has been elected a vice-president of Pennsalt Chemicals Corporation, Philadelphia.

Sodium Chlorate Unit Construction Started

The chemical division of Pittsburgh Plate Glass Company has begun construction on a 15,000-ton-a-year sodium chlorate plant at its Lake Charles, La., installation.

Preliminary site preparation is under way for the multi-million dollar unit, which is slated to get into operation by September of next year.

Salt converted into brine, basic raw material for chlorine and caustic soda produced at the Lake Charles plant, is also the basic raw material used in the electrolytic production of sodium chlorate.

According to Joseph A. Neubauer, vice-president and general manager, a chlorate cell developed by Pittsburgh Plate will be utilized in the new facility.

He says the cell was developed for a subsidiary, Standard Chemical, Ltd., of Montreal, and has been effectively used in production of high-purity sodium chlorate since 1959.

Domestic customers of Pittsburgh Plate

—Continued on page 51

DuPont TiO_2 Works Set For 30 Percent Expansion

E. I. duPont de Nemours & Co. will expand its new Johnsonville, Tenn., titanium dioxide plant by 30 percent within the next twelve months.

The project, said to be the first step in a planned series of major expansions, will raise the plant's capacity from an estimated 45,000 tons yearly to 58,000 tons. The plant was placed on stream in February, 1959.

DuPont also operates an 85,000-ton-a-year plant at Baltimore, Md., and a 45,000-ton unit at Edge Moor, Del.

DuPont-GM Case: Tax Relief Faces A Cloudy Future

Legislation seeking to ease the tax burden of E. I. duPont de Nemours & Co. stockholders, introduced last week in the senate and the house, appears to face a cloudy future.

The measure, offered up by Sen. John J. Williams of Delaware and Rep. Noah Mason of Illinois, is an outgrowth of the Supreme Court's decision in May that the big Wilmington, Del., chemical maker must get rid of its 63 million shares of General Motors Corporation stock.

Although the bill was drafted with the assistance of the Treasury Department, it has failed to win the support of either Treasury or the Department of Justice.

The two agencies object to the heavy revenue losses they say the bill will entail, but indicate they might not oppose some other approach to the tax relief problem involved in antitrust divestiture decrees.

Justice Department's New Position

The Justice Department's stand is even less favorable than it was on the relief bills considered during the Eisenhower administration.

Last year the department expressed the view that tax relief in forced divestiture antitrust cases might help trust law enforcement, but Attorney General Robert Kennedy has now written to the house ways and means committee that he does not think tax relief laws are necessary for antitrust law enforcement.

The upshot of these developments seems to be that the Kennedy administration is leaving the question of providing tax relief in antitrust cases entirely up to congress. Some members of congress believe that this will foreclose any action this year on the legislation.

The Williams-Mason bill is not directed specifically at the tax problems of the duPont stockholders—it is, rather, general legislation applicable to other forced stocks distributions—but there is little doubt that the duPont-GM case is the motivating influence.

DuPont is now preparing a divestiture scheme in compliance with the Supreme Court order, and this must be ready for presentation to the Chicago Federal District Court during the Labor Day Week.

The new relief bill differs from prior measures dealing with forced divestiture

—Continued on page 60

Acrylics and Methacrylate First on ICI's Dutch Agenda

Imperial Chemical Industries, Ltd., will spend $19.6 million on the first stage of its Rotterdam complex for plants to produce acrylic plastic sheets and molding powder and methyl methacrylate.

The acrylic facilities will be the first plants on the 300-acre site in Rotterdam harbor which ICI will call its Rozenburg works. Some of these first plants are expected to be in operation by the end of 1963, with construction beginning this year.

ICI's board has approved the expenditure, but both British and Dutch authorities must approve various aspects of it. The company says it has already developed substantial sales of its "Perspex" acrylic sheet in Europe.

Suntide Presses Button At Ethylbenzene Facility

Suntide Refining Company has placed a new ethylbenzene unit on stream at Corpus Christi, Tex., tallying its sixth petrochemical facility. The unit is rated to turn out 330 barrels a day from a charge stock of 1,500 barrels of mixed xylenes.

Suntide, a wholly-owned subsidiary of Sunray Mid-Continent Oil Company, Tulsa, Okla., will start construction in August on two other petrochemical plants—a styrene unit and a paraxylene unit.

Another Sunray Mid-Continent subsidiary, DX Sunray Oil Company, recently started up a 1,000-barrel-a-day benzene plant at Tulsa (OPD, 7/10/61).

Germany Puts Sweeping Drug Law Into Effect August 1

The first comprehensive drug legislation ever enacted in the German Federal Republic will go into effect August 1 with a host of licensing, labeling and registration requirements.

While the new regulations will mean plenty of red tape for Germany's booming drug industry and US exporting firms, observers do not see them as foreshadowing a restrictive policy.

As reported by Department of Commerce last week, the legislation neither discriminates against imported products nor regulates local production. Among its major provisions are:

- Licensing requirements for manufacturers located in Germany.
- Labeling requirements and registration requirements for manufacturers, distributors and importers of patent medicines. The registration law goes into effect October 1 and provides for a transition period for all patent medicines in commercial circulation as of September 30.

The application for registration is to be filed with the Federal Health Office in Berlin.

It must contain the name and address of firm or applicant, designation of drugs, composition by kind and quantity and all ingredients according to the German Pharmacopeia, if listed, otherwise by usual scientific name.

If the drug contains unknown materials, a detailed report must be included on pharmacological and medical properties. Form of administration, directions for use and size of package must also be reported.

The application for registration is to be supplemented with a sample container and outer wrapping or the text thereof, a description of the enclosures, and for imported patent medicines, proof that

—Continued on page 51

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Drug Research Ante Rises

Where are drug industry profits going?

No less than $227 million this year will be plowed back into research for new drugs to cure human ailments, according to an estimate released last week by Pharmaceutical Manufacturers Association.

This is up from a record $206.5 million spent in 1960—and 276 percent over the mere $60 million that went into comparable research in 1951.

The new high in 1960 was reached despite a general downturn in profits, PMA notes. In addition, $5.4 million was spent for research and development of veterinary drugs, a figure expected to rise to $5.8 million in 1961.

The rapidly expanding research activity is "an index to the highly competitive search for breakthrough discoveries to combat many common ailments—notably cancer and cardiovascular disease," Dr. Austin Smith, PMA president, says.

On an average, the research outlay has risen $16.7 million yearly since 1951. In comparison, the country's gross national production increased 52 percent in the same period from $329 billion to a current $500 billion.

More than 10 percent of last year's drug research funds were into research outside company laboratories, PMA notes. The industry spent about $21 million to support studies in medical schools, hospitals and other research institutions.

Consolidating the 1960 reports of eleven major drug firms, PMA finds that their sales showed a net increase, but that profits were off 3.6 percent from 1959. Still, the companies plowed back an average of 7.7 percent of income into research.

Where have drug industry profits gone?

From 1948 through 1960 inclusive, $1.25 billion has gone into research, according to PMA's records.

Chemical Efforts to Win Tax Spur For New Capital Investment Gaining

Efforts of chemical producers to get a modification of the federal tax laws that will prove an incentive to new capital investment are gaining ground. The house ways and means committee last week agreed to grant industry a flat 8 percent tax credit on new equipment purchases—within certain limitations. The action amounts to a rejection of the administration's sliding-scale scheme of tax credits that was strongly opposed by the chemical industry as "too complex" and "too little help" in solving the problems of plant and equipment rehabilitation (OPD, 6/19/61).

METALS DIVISION HEAD: Graham B. Brown, who has joined Stauffer Chemical Company at Richmond, Calif., as general manager of its metals division.

The substitute, however, still leaves much to be desired from an incentive standpoint.

Limitations on the Tax Credit

As presently drafted, the 8 percent credit would be limited to spending for new equipment, to the exclusion of new plants. Also, new purchased assets must be held for a minimum of six years to gain the credit.

Another limitation is on the amount of the credit. The committee's substitute states that in no event shall the total amount of the credit exceed 50 percent of the company's income tax.

It is not clear from the announcements of the committee just how inclusive the definition of new equipment is intended to be in the new law.

Committee members say that the def-

—*Continued on page 37*

UK's Drug Savings: $4.9 Million So Far

Britain's National Health Service is getting some $4.9 million clipped off its yearly drug bill. The savings are being effected through a voluntary price regulation scheme with the UK drug industry.

But Minister of Health Enoch Powell claims the NHS drug bill is running around $280 million a year, and he regards the price cuts so far "only as a beginning."

Mr. Powell told Parliament that bids

—*Continued on page 51*

IMC Will Acquire Aristo, Producer of Binding Cores

International Minerals & Chemical Corporation, Skokie, Ill., will complete acquisition of Aristo Corporation, a Detroit, Mich., manufacturer of binding materials, on Wednesday (July 26).

Terms of the merger call for exchange of an undisclosed number of IMC shares for all the outstanding stock of Aristo, a family-owned concern which makes binding cores for foundries.

IMC already produces bonding clays for the molding segment of the foundry industry, a spokesman for IMC notes. As a result of the merger, the company's industrial minerals division will add core room products to its line.

Aristo will be operated as a subsidiary of IMC. George Abbott will continue as president.

OPD Reports From Europe

Soviet Union Banks on West As It Aims for 200 Percent Increase in Chemicals Output

Russia's seven-year plan (1959-1965) aims at a 200 percent increase in chemical production—against an 80 percent boost for industry generally. The Moscow planners make no bones of their hopes to buy in the west much of the equipment and process know-how for the 140 projected chemical plants. A new and more realistic perspective on Soviet industrial investment and growth is possible this year, thanks to the devaluation of the ruble last January.

Where the old official figure for chemical investment in 1960 was $2.3 billion, the new figure is $1 billion. European specialists believe that most official investment figures for previous years also should be reduced by the same percentage to arrive at more realistic numbers.

Soviet Aim: 'Big Chemistry'

The aim of the plan for the chemical industry, according to Vladimir Bibishev (an economist in the State Scientific & Economic Council), describing the chemical plans in a special study on all Soviet industry published by the London *Financial Times*, is to create "big chemistry" on the present base.

Mr. Bibishev indicates that the plan has started well. Volume was up for chemicals as a whole by 12 percent in 1960, or less than the gain recorded in France and Germany, and the gross chemical output this year is expected to add another 14.5 percent.

Total investment allocations for chemical construction this year are about $1.4 billion, or 40 percent above the recalculated figure for 1960.

The seven-year plan puts special emphasis on increasing the output of plastics, synthetic resins, fibers and rubber. By 1965, Russia hopes to produce a total of 1.8 million tons of polymers, or a growth of 620 percent for the seven years.

Consumption of plastics in the engineering industry is expected to reach 500,000 metric tons in 1965, against 120,000 tons in 1960.

Synthetic fibers output has grown by 73,000 metric tons, or almost a third, since 1957, Mr. Bibishev says, and textile production of synthetic-cotton mixtures has increased by 120 percent.

Typical of Soviet industrial statistics, Mr. Bibishev states 1965 fiber targets in terms of the square area of various textile mixtures to be produced that year. For instance, synthetics will go into 450 million meters of woolens.

Plants going into operation this year include synthetic rubber units and seven

—*Continued on page 36*

Hydrogen Peroxide Storage Facility Being Built by Shell

Work has begun on hydrogen peroxide bulk storage facilities near Charlotte, N.C., which will enable Shell Chemical Company to provide faster tanktruck service to the textile, paper and furniture industries in the southeastern states, particularly the Carolinas, Georgia and Virginia.

New facilities are being constructed adjoining Shell Oil Company's petroleum products terminal on the Plantation Pipe Line. Tanktruck deliveries of hydrogen peroxide from the new installation are expected to begin within the month.

Fumaric Plant on Stream

Heyden Newport Chemical Corporation has brought on stream its 8-million-pound-a-year fumaric acid plant at Garfield, N.J. The unit's operation is based on a Scientific Design Company process. Marketing will be handled by Heyden's chemical division.

TECHNICAL SALES CHIEF: Dan K. Farstad, appointed director of technical sales and services by Spencer Kellogg & Sons, Inc., Buffalo, N. Y.

Pfizer Will Acquire Limestone Company

In a major diversification move, Chas. Pfizer & Co. has argeed to acquire New England Lime Company in exchange for about 300,000 shares of its common stock.

The merger, subject to approval by New England Lime stockholders, will also bring into Pfizer's fold Nelco Metals, Inc., a subsidiary.

Nelco produces high-purity metallic calcium and magnesium and a line of limestone products at Canaan, Conn. The parent company maintains its headquarters and operates a limestone quarry and plant at Adams, Mass.

Among markets for lime and limestone are agricultural feed supplements, soil conditioners, fillers for floor tile, construction materials and paper fillers and coaters.

Pfizer's interest in these materials, aside from diversification, involve the company's animal health activities and chemical manufacturing operations.

John E. McKeen, Pfizer president, says no personnel changes are contemplated either in New England Lime or Nelco.

Acquisition price was computed on the basis of 1.5 shares of Pfizer for each outstanding share of New England Lime.

Mobil Successful in Bid For British Plastics Firm

Socony Mobil Oil Company has made good on its bid to acquire O. & M. Kleeman, Ltd., British plastics processing and marketing company (OPD, 5/29/61).

Through Mobil Holdings, Ltd., an overseas affiliate, it has secured agreements from Kleeman stockholders to sell 90 percent of the company's stock. Mobil's investment in the Kleeman shares comes to about $20 million.

Two British financial houses handled the transaction which began with an offer to buy the stock.

Narcotic Drug Labels Must Now Be in Metric Units

Bureau of Narcotics last week notified manufacturers of narcotic drugs and preparations to change the labels of their preparations so as to show stock classifications and contents in metric measurements.

Under the new narcotics control law, these drugs are identified as Class A—taxable narcotics under full control; Class B—taxable narcotics permissible on oral prescription; Class X—exempt narcotic preparations under moderate control, and Class M—exempt narcotic preparations under minimum control.

The bureau says that the designation of the class on the label may be accomplished by merely over-printing present labels with a large "A," "B," "X," or "M," as the case may be without explanation or other designation, or by insertion of the letter in some available space when printing new labels. The word "Class" need not be used.

On over-printed labels ink of a contrasting color affording clear legibility should be used. When not extended across other printing, the same color of ink may be used.

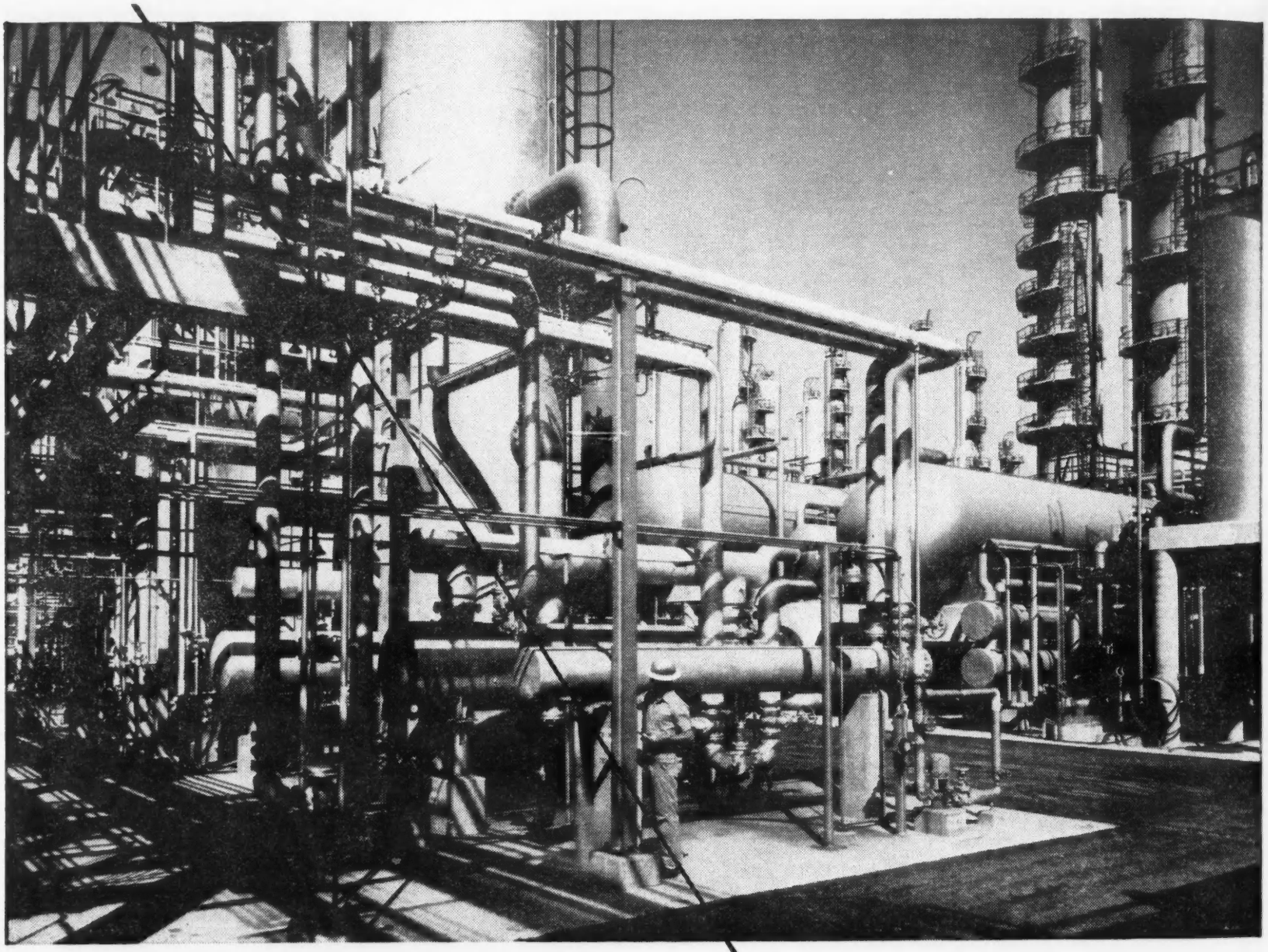
The lettering should be clear and large enough to afford easy identification. In the case of small packages, the lettering should be as large as the size permits.

Manufacturers are also requested to indicate on their labels, as these come up for revision or reprint, the narcotic content of the product in terms of metric weights — i.e., milligrams per tablet,

—*Continued on page 38*

Meeting Dates
May Be Found
On Page 33

Important Quality Improvements in *Petro-Tex n-BUTENE-1*



Deliberate removal of undesirable olefins from our commercial production of Petro-Tex n-Butene-1 has resulted in a very substantial quality improvement over the past two years.

Petro-Tex n-Butene-1 is now being used by important linear olefin polymer producers. As a highly reactive alphaolefin, it undergoes a wide range of oxidation, hydration, alkylation and oxo-process reactions which commend further study of its use for n-butyl alcohol, butylene oxides as well as various copolymers and petro-chemicals.

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Detergent Alkylate Producers Find Prospects Cloudy Now and in Future

OPD 'Depth' Report on Detergent Alkylate

—*Continued from page 3*

it is generally thought, in which syndets could further replace soaps except in the toilet bar field.

If these problems aren't enough, one more specter looms on the horizon which could deal the whole detergent alkylate market a body blow: the fact that bacteria won't completely break down alkyl benzene sulfonate in sewage disposal systems.

The low rate of biodegradability of ABS is primarily what causes foaming in sewage treatment plants, hence stream (surface-water) pollution. The best septic tanks remove only from 10 to 20 percent of the ABS, and the remainder goes to pollute ground water.

It takes a long time for ground water to become polluted, but once this has taken place, it takes approximately three times longer to purify it.

Critical Water Pollution Areas

Critical areas are St. Paul-Minneapolis; Suffolk County on Long Island (where there are said to be 17,000 wells contaminated with ABS!; Dade County, Fla.; Chanute, Kans.; Norfolk, Va.; Huntsville, Ala.; Albuquerque, N.M., and La Crosse, Wisc.

It is expected to get worse with the increase in population and the continuing shift to the suburbs which insures the increased use of septic tanks.

Some industry spokesmen suggest that the presence of ABS in drinking water is a good tracer. That is, it indicates the presence of other contamination.

But it is felt that perhaps there would be no contamination if it were not for the ABS, which is such a good wetting agent that it acts as a vehicle for the transport of impurities.

Tests have been conducted at the Robert A. Taft Sanitation Engineering Center in Cincinnati, Ohio, which proved that bacteria and ABS were virtually indifferent to one another—that the action and transmission of bacteria was in no way speeded up by ABS.

However, soon after this project was completed, some sanitation engineers from Germany visited the center and mentioned that they had conducted similar experiments, but that their findings had not been the same.

Further experiments are being planned in Cincinnati to test the reaction of viruses to ABS. Dr. Richard Woodward, chief of engineering of water supply and water pollution research, says: "It is plausible, but undemonstrable as yet," that the detergent facilitates the transmission of viruses.

Even if it can be proved that detergent alkylate is not responsible for drinking water contamination and that it actually acts only as an indicator of pollution, Dr. Woodward says: "It is not a good additive to the water supply."

West German Sewage Legislation

The West Germans have a much more severe problem in their sewage treatment plants; in fact a bill has passed the Bundesrat restricting the manufacture of surface-active agents that are not readily biodegradable in water purification plants, in natural waters or in the soil. As yet, the bill has not been signed into law, but opinion here is that it soon will be.

Regulations will probably call for a surface-active agent more readily biodegradable than in the highly branched-chain alkyl benzene sulfonate. Some industry men believe the less branched-chain ABS might meet standards the German lawmakers will set up. One thing is certain: No clear-cut solution is near at hand.

A few weeks ago a German detergent manufacturer called his New York supplier to order twelve tons of "ABS 100 percent biodegradable under normal sewage-treatment operations." "Are you serious?" was the essence of the reply.

Industry and other interested parties are not sitting idly by. A many-pronged attack on the pollution problem is now in progress. Some possible answers:

- The use of "soft" ABS as a stop-gap.
- Development of an ABS that is sufficiently biodegradable to eliminate foaming.
- Switch to other materials.
- Treatment of effluent by activated carbon or other filtering agents.
- Treatment by an ion-exchange process.
- Physical removal by induced frothing and its disposal by burning and by digestion.

A number of surface-active agents are in the running to replace "hard" ABS, but none of them is produced in sufficient quantities to be economical. One likely contender is Shell Chemical International Company's "Dobane JN," which is produced from cracked wax olefins.

This is the material that has been used in the Luton pilot-area experiments in England. The experimenters tried to replace all of the highly-branched chain ABS with less-branched chain ABS to see if foaming in the streams would be lessened.

This new type of detergent was supplied to the Luton area on August 1, 1958. As of press time Friday (July 21) the fourth and final report had not been received, but it is understood that even though foaming in the streams has been visibly diminished, the project is something less than a success.

It was apparently impossible to replace more than 70 percent of the "hard" ABS with the "soft" material.

Results obtained from the actual pilot-area never duplicated those gotten in the laboratory but, as near as could be ascertained, about 80 percent of the "soft" ABS was removed during sewage treatment whereas only 60 percent of the "hard" ABS was removed.

This, of course, is an improvement, but by no means the answer to the frothing problem. Some US industry spokesman feel, however, that a type of this "soft" ABS would be approved in Germany as an effective stop-gap, and that ultimately something else will replace "soft" ABS.

What this new material might be is a widely-disputed point. Outside the United States, it is more feasible to use material produced from cracked wax olefins, but refinery economics here are prohibitive.

Ziegler Alcohols a Possibility

For possble use in the US, the Ziegler-type fatty alcohols have been suggested. At the present time, however, these alcohols are too high-priced. Continental Oil Company's Lake Charles, La. plant comes on stream next month with capacity in excess of 50 million pounds per year of "Alfol" fatty alcohols.

(Continental and Deutsche Erdoel AG, foreseeing a lush market in Europe should alkyl benzenes be legislated against, will put up a 50,000-ton "Alfol" plant near the Kiel Canal in West Germany. Completion date: mid-1963.)

Also suggested is a combination of sulfated alcohols and pentadecyl benzene. Some industry spokesmen feel that the nonionics will increase in popularity at the expense of ABS.

They are relatively low-priced and have already gained favor as surfactants in shampoos, bubble baths and dishwashing compounds.

Physical Removal Being Studied

The principle of removing ABS from sewage treatment plants has been investigated by the Association of American Soap & Glycerine Producers at the University of California.

Experiments were concerned primarily with the removal of ABS by induced frothing, and its disposal by burning and by digestion. Some 90 percent removal of ABS was found to be feasible by frothing of either primary settled sewage or activated sludge effluent.

The use of activated carbons to remove ABS has been the subject of studies carried out by the Department of Sanitation Engineering & Water Resources, Johns Hopkins University, in Baltimore, Md.

Apparently, new types of activated carbons would be required to do specific jobs. The concentration of existing activated carbons required for drastic reduction of ABS might justify the search for specific activated carbons.

Still another way to get rid of ABS in the water supply is by the use of an ion-exchange process. According to Dr. I. M. Abrams, of Chemical Process Company, Redwood City, Calif., ABS can be almost completely removed when passed through a column of plastic-like material known as "A-102" ("Duolite").

Ion-Exchange Methods Reported

Dr. Abrams says that less than one tenth of a percent of ABS escapes in this ion-exchange process, in which one cubic foot of "A-102 D" can clean 750,000 gallons of water containing two parts per million of the ingredient.

This process is still in the laboratory stage, and he cannot say when it will be ready for commercial application. He does give an idea of the cost: from 1 cent to 5 cents per thousand gallons of liquid treated which contains two parts per million of ABS.

Dr. Abrams says that the ion-exchange process is most effective in relatively low concentrations of ABS—from one to ten parts per million. And for this reason, the process would perform best if added in the final stages of treatment.

The most puzzling course in this dilemma is being steered by the soapers. Rather than meet the problem of biodegradability head-on, they choose to muddle the situation even further.

For reasons of efficacy they are moving toward tridecyl benzene from dodecyl benzene. The tri-isomer is even more resistant to biological attack than the dodecyl.

The difference in biodegradability is slight. It is generally conceded that the tridecyl, which is a longer alkyl chain containing some thirteen or more carbons, is somewhat more resistant to breakdown by bacteria.

When used at low concentrations in soft warm water, the shorter-chain material requires additives to produce a good volume of lasting suds.

In heavy-duty formulations, when suds are desired, it is more economical to use tridecyl benzene rather than more additives, which can be expensive.

It's more than evident that the pollution problem is the key to the future of detergent alkylate. But it's not the only one. A present worry to domestic producers is the decline in output expected this year, marking the third straight year alkyl benzene output has fallen off.

One large factor in this decline has been the decrease in exports. Even though they shot up in 1960 to over 80 million pounds, they are estimated to fall to a low 55 million pounds by 1965.

Two of the United States' biggest customers, Japan and Mexico, are rapidly becoming self-sufficient. Japan Petroleum Cleansing Material Company, which is a joint venture of Oronite Chemical Company and Japan Petrochemical Company, has the capacity to produce 33 million pounds per year of detergent alkylate.

By 1963, Mitsubishi Chemical Company will be on stream with a 22-million-pound capacity. Japan bought 28 million pounds from the US last year.

Mexican Developments

Petroleos Mexicanos SA plans a 60-million-pound capacity in Mexico. That nation took 18.9 million pounds from the US in 1960.

Further, Shell has started production at Corio, Victoria, Australia. Annual capacity is estimated at 22 million pounds.

There is a ray of hope, however, concerning exports. The continual development of backward countries should account for increased sales abroad.

Many of the inhabitants of Africa, Asia and Latin America are expected to be in-

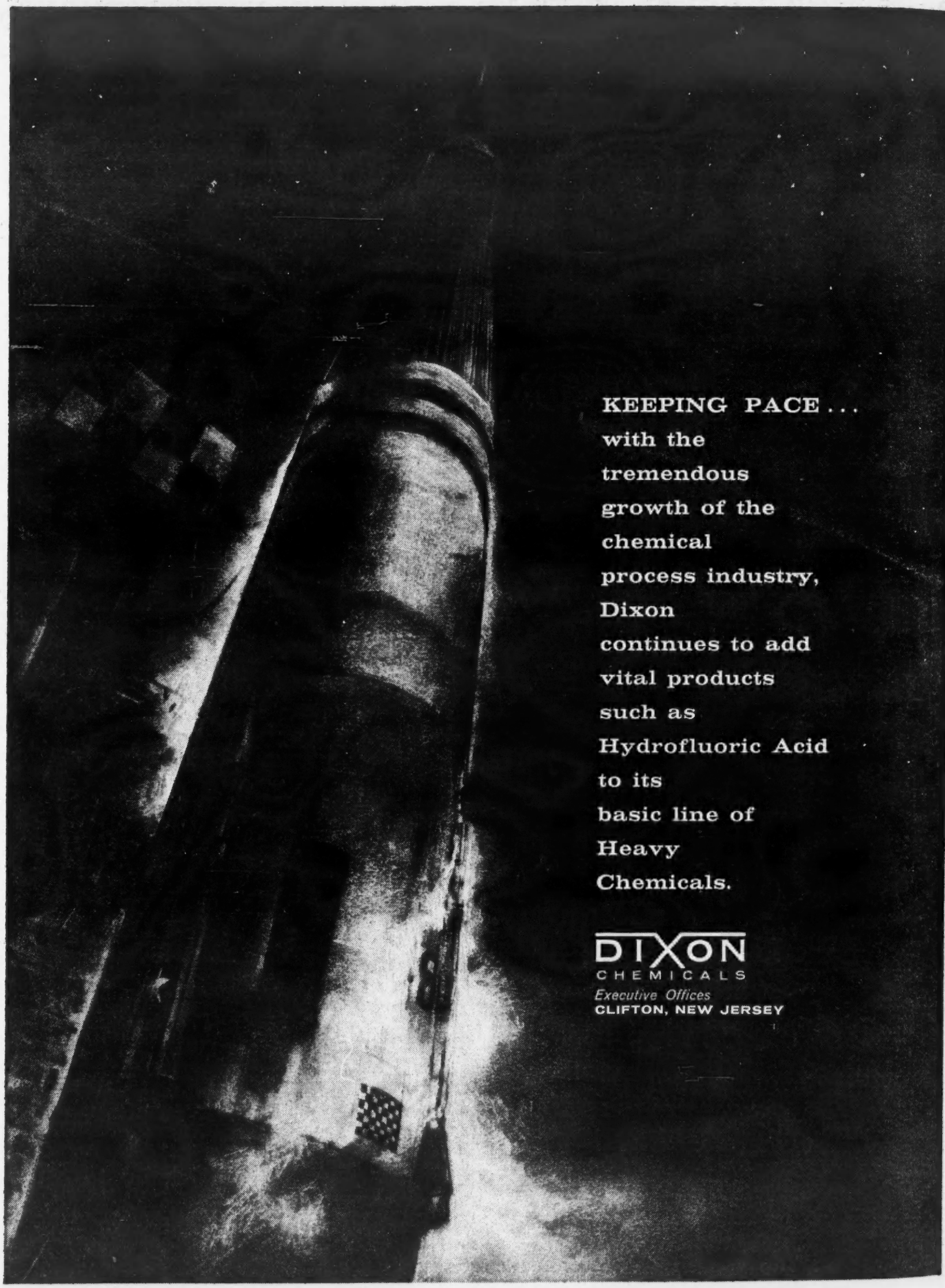
—*Continued on page 46*

DETERGENT ALKYLATE OUTSIDE THE US*

Buildup Will Add 126 Million Pounds in '63

	1961	1963
Australia:		
Shell	22	22
Benelux:		
S. A. Petrochim	26	26
Shell	—	22
Canada:		
Imperial Oil	30	30
Shell	20	20
France:		
Shell-St. Gobain	65	65
Petrosynthese	85	85
Esso	65	65
Germany, West:		
Bergkamen	7	7
Kuels	80	80
Rheinpreussen	40	40
Italy:		
Sicedison	40	40
Societa Italia Resine	22	22
Japan:		
Japan Petroleum Cleansing	33	33
Mitsubishi Chemical	—	22
Mexico:		
Pemex	—	60
Netherlands W. I.:		
Shell	22	22
United Kingdom:		
Grange	33	33
Monsanto	33	33
Shell	125	125
Grand Total	748	852

*Estimated free world annual capacities in millions of pounds; includes detergent alkylate made from benzene and tetrapropylene, cracked wax olefins, naphtha and kerosene.


KEEPING PACE . . .
with the
tremendous
growth of the
chemical
process industry,
Dixon
continues to add
vital products
such as
Hydrofluoric Acid
to its
basic line of
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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, July 21 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. ..... lb. 1.90 - 2.40
Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld ..... lb. .12 - —
dms., t.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - —
Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs. ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms., any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, coml., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs 10.45 - —
glacial, syn., CP, dms., c.l., divd. E. 100 lbs. 18.75 - —
tech., dms., c.l., divd. E. 100 lbs. 13.75 - —
dms., t.c.l., divd. E. ... 100 lbs. 15.25 - —
tanks, divd. E. ... 100 lbs. 10.00 - —
USP, tanks, divd. E ... 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., divd. E lb. .16½- —
aluminum ret. dms., t.c.l., divd E. lb. .18 - —
tanks, divd. E. lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib. dms., c.l., divd lb. .80 - —
fib. dms., t.c.l., divd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., divd lb. 1.35 - —
fib. dms., t.c.l., divd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., divd lb. .82 - —
fib. dms., t.c.l., divd ..... lb. .83 - —
Acetone, CP, dms., c.l., divd . lb. .09½- —
dms., t.c.l., divd ..... lb. .11 - —
tanks, divd. ..... .07 - —
Acetonitrile, dms., c.l., frt. alld. lb. .37½- —
dms., t.c.l., frt. alld ..... lb. .39 - —
tanks, frt. alld ..... lb. .35 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms., 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns. dms ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., t.c.l., works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - —
dms., 100-lb. lots, same basis ... lb. 1.54 - —
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .20 - —
cs., t.c.l., ex whse ..... lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 - —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd. (80 mesh), 250-lb dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms. c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS
Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb .50 .55
Acrolein, tech., dms., c.l., works lb .36 —
dms., t.c.l., works ..... lb. 36¾ - —
tanks, works ..... lb .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 —
dms., t.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.t., divd lb. .42½- —
dms., t.c.l., t.t.l., divd ..... lb. .43½- —
tanks, divd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld. lb. .38 - —
tech., polymerization, tanks, same basis lb. .38 - —

Abies Siberica Oil—Ammonium Biborate

Acrylonitrile, dms., c.l., t.l., frt. equald ..... lb. .17½- —
dms., t.c.l., t.t.l., frt. alld ..... lb. .18½- —
tanks, frt. equald ..... lb. .14½- —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., divd..... lb. .32¼- —
bgs., t.c.l., divd..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs. or more, f.o.b. works lb. 5.25 - —
dms., 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., t.c.l., works lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l. divd lb. .99 - —
fib. dms., t.c.l., divd lb. 1.04 - —

ALCOHOLS
Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).

Alkali blue dry, 250-lb. bbls., divd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c. higher W. of Rockies
Allethrin, 90%, dms., frt. alld lb 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb. 6.50 6.55
2½% dms frt. alld. lb. .93 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. divd..... lb. .32½- —
dms., t.c.l., divd..... lb. .34 - —
tanks, divd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb 1.50 - —
55-lb. cbys., 1,045 to 4,950 lbs works lb. 1.53 - —
55-lb. cbys., 55 to 990 lbs. works lb. 1.60 - —
Allyl chloride, dms., c.l., divd lb 17½- —
dms., t.c.l., divd ..... lb. .19 - —
tanks, divd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms ..... lb. .60 - .70

Aloe, Cape, cs. ..... lb. 35 - .40
powd. cs. ..... lb .60 .65
Curacao, kgs. ..... lb 75 - —
powd., kgs. ..... lb 85 - —
Aloin, USP, bbls., dms., kgs ..... lb. 3.25 - 3.75
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline)
Alphaterpinol (see a-Terpinol)
Alphatocopherol (see a-Tocopherol)
Alum ammonium, gran., bgs., c.l., works 100 lbs. 4.80 - —
Lump, dms., works ..... 100 lbs. 5.75 - —
Powd., dms., works ..... 100 lbs. 5.70 - —
Alum potassium, gran., bgs., c.l., works 100 lbs. 5.05 - —
Lump, dms., works ..... 100 lbs. 5.80 - —
Powd., dms., works ..... 100 lbs. 5.95 - —
Alum, potash-chrome, dms lb 17 — —
Alumina, calcined bgs. c.l., works lb. .0535- —
bgs., t.c.l., works ..... lb. .056 .0835
Aluminum acetate, basic soln., 24%, bbls t.c.l works lb .14 —
Aluminum chloride, coml., anhyd., dms., c.l., works frt equald lb .16 —
dms., t.c.l., works lb 16½- —
cryst., dms., c.l works 100 lbs 21.00 —
dms., t.c.l., works 100 lbs 21.50 —
Soln., 32° cbys., c.l., works lb .0495- —
cbys., t.c.l., works lb .0570- .1000
tanks, works 100 lbs. 3.95 —
NF, gran., dms., works lb. .31 .33
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¼ —
bgs., t.c.l. works lb. .17¼ .19¼
bulk, c.l. basis 80% lb. .14½ —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works, 100 lbs 11.00 - —
containers extra, t.c.l. works 100 lbs 11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk c.l. same basis ..... lb. .0330- —
Light, bgs., c.l., t.l., works .... lb. .09½ —
bgs., t.l., to c.l., works ..... lb. .10½- —
bgs., t.t.l., works ..... lb. .11½- —
Aluminum hydroxide, dried, USP XV fib dms. works lb. .82½- —
fib dms., contract, works lb. 79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms. works, lb. .19 - —
fib. dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate).
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb pigs 10,000-lb lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste lining, extra-fine, dms lb. 71 - —
Standard grade, dms lb. 48½- —
Aluminum powder lining, extra-fine, dms lb 1.13 - —
Standard grade, dms lb. 83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb. for 100-lb. dm., 1½c per lb for 50-lb dm., 3c. per lb. for 10 lb can and 5c to 12c. per lb. for smaller containers. Deduct 1c per lb. for single shipment of 400 to 1,499 lbs 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more.
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., t.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., t.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., t.c.l ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton 41.00 - —
bulk, c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., t.c.l., works, frt. equald, 100 lbs. 4.30 6.30
USP, gran., 400-lb. dm., works, lb. .30 —
USP, powd., dms., works lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 1.60
Aminoazotoluene base, bbls., 100% basis lb. 1.15 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb 1.72 —
2-Amino-4-chlorophenol, tech., solid, dms., frt. alld lb. 2.15 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 —
Aminoethyl ethanolamine, dms., c.l., divd lb. .475 - —
dms., t.c.l., divd ..... lb. .49 - —
tanks, divd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., t.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
dms. smaller lots. ..... lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.25 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald E. of Rockies ton 92.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies ton 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 6.25 —
bgs. t.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works lb 1.90 —
Ammonium biborate, gran., dms., c.l., works ton 325 —
dms., ton lots, ex whse 100 lbs 22.86 —
dms., smaller lots, ex whse 100 lbs 24.11 —

Abbreviations
Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructively—distilled
dl-	dextro-laevo
dist.	distilled
distr.	distributor
djns.	demijohns
divd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S.E.	southeast
sec.	secondary
secs	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truckloads
t.w.	tankwagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Ammonium bicarbonate, dom., dms., c.l., works..100 lbs. 7.50 • —
dms., l.c.l., works.....100 lbs. 9.50 • —
Ammonium bichromate, dms., works. lb. .42 • .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 • —
dms., l.c.l., same basis lb. .46 • —
Ammonium carbonate, USP, lump, dms., c.l lb. .15½- —
Ammonium chloride, white, tech., fine gran., bgs. c.l., works. 100 lbs. 6.00 • —
bgs., l.c.l., works..... 100 lbs. 8.00 6.45
USP, gran., 250-lb. dm..... lb. .17¼- —
Ammonium citrate dibasic, 250-lb. dm f.o.b. works lb .77 • —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate, tech., 200-lb. dm., f.o.b. works E lb. .45 • —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 • —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l. frt. alld ..... lb .21½- —
tanks, frt alld ..... lb. .19½- —
Ammonium lignin sulfonate, bgs., bgs, l.c.l., works ..... 100 lbs. 3.75 - 4.25
bgs. l.c.l. works 100 lbs. 3.40 3.65
Ammonium linoleate, 80%, dms., works lb. .50 • .55

Ammonium molybdate, CP, cryst., 400- lb. dms., 15,000-lbs. works. lb. 1.35 • —
400-lb. dms., 2,000-lb. contracts, work..lb. 1.36 • —
400-lb dms. works .....lb. 1.37 • —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.67.00 • —
dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 • —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.70.00 • —
Ammonium oxalate, tech., fine gran., 250-lb. dm., f.o.b works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton.193.00 • —
bgs., ton lots, ex whse..100 lbs.15.27 • —
bgs., smaller lots, ex whse. 100 lbs.16.52 -18.52
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 • —
dms., smaller lots, works lb. .20 • .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 • —
Dibasic, NF, V, bbls., dms lb. .46 • —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —

Ammonium silicofluoride, dms., works lb. .13¼- .13¾
Ammonium sulfamate, bgs., c.l., t.l., works lb. .19 • —
bgs., l.c.l., works..... lb. .20½- .27
Ammonium sulfate, standard granular, bulk, f.o.b works, base price ton.32.00 • —
Purif., c.l., 100-lb. bgs., f.o.b. works..lb. .08¼- —
Large granular, bulk, c.l., works. ton.35.00 • —
bgs., c.l., works..... ton.40.00 • —
Tech., bulk, c.l., t.l., works ton.52.00 • —
bgs., c.l., t.l., works ton.56.00 • —
bgs., l.c.l., l.t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 • —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 • —
dms., l.c.l., works lb. .22 • .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 • —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, 6b. dms., 100-lb. lots lb.15.00 • —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, 6b. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, 6b. dms., lb. 4.20 - 5.60

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7158

*California Chemical Company's trademark for its detergent intermediate.

Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld. E. of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 • .20½
tanks, same basis lb. .16 • .16½
ex pentane, reg., dms., c.l., dlvd. lb. .19 • —
dms., l.c.l., dlvd. ..... lb. .21½- —
tanks, dlvd. ..... lb. .16½- —
Tech., dms., c.l., dlvd..... lb. .17 • —
dms., l.c.l., dlvd. ..... lb. .18½- —
tanks dlvd ..... lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. ..lb. .19 • —
dms., c.l. dlvd. .. lb. .20½- —
tanks, dlvd ..... lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 • —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. ..... lb. .16½- —
Primary, dms., c.l., frt. alld.... lb. .20¼- —
dms., l.c.l. frt. alld.... lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 • —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 • —
Tert-synthetic, dms., c.l., frt. alld. E lb. .17 • —
dms., l.c.l., frt. alld. E. lb. .18½- —
tanks, frt. alld E lb. .14½- —
1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works ... lb. .43 • —
tanks, works ... lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 • —
dms., l.c.l., works ... lb. .70 • —
tanks, works ... lb. .60 • —
Amyl n-butyrate, dms. ... lb. 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .28 • —
dms., l.c.l., works ..... lb. .29 • —
Amyl salicylate, cns., dms. ..... lb. .71 • —
Amyris oil, dms ..... lb 1.50 • —
Anethol, tech., dms. ..... lb. .80 • .82
USP, cns., dms. ..... lb. 1.05 • —
Angelica root, bls ..... lb. .0 • 1.00
Angelica root oil, bots ..... lb.120.00 -140.00
Angelica seed oil, bots ..... lb.120.00 -130.00
Aniline dms., c.l., frt. alld..... lb. .20 • —
dms., l.c.l., frt. alld.. ..... lb. .21 • —
tanks, frt. alld ..... lb. .18 • —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., t.l., 20,000 lbs. min., frt. alld lb. .33 • —
dms., l.c.l., same basis lb. .35 • —
Anise oil, USP, dms ..... lb. 1.90 • 3.00
Anise seed, Turkish, bgs..... lb. .24 • —
Spanish, bgs. ..... lb. .32 • —
Anisic aldehyde, dms ..... lb. 1.50 • 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 • —
dms., l.c.l., same basis..... lb. .82 • —
tanks, same basis ..... lb. .78 • —
p-Anisidine, dms., works ... lb. .97 • —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 • —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 • —
Anthraquinone, 99.5% bgs., c.l., frt. alld lb. .70 • —
bbls., l.c.l., same basis lb. .73 • —
Electrical grade, bgs. l.c.l., same basis lb. 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines..... lb. .33 • —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- .30
bgs., l.c.l., frt. alld. ..... lb. .28 • .31½
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, dlvd lb. .23 • —
bgs., smaller lots, dlvd lb. .24 • .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .44½- —
pails, l.c.l., works ... lb. .46½- —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 • —
Apricot kernel oil, USP, dms lb. .55 • .70
Arabic gum, amber sorts, 10 bgs. lb. .21 • .23
USP, powd., bbls..... lb. .27 • .30
Areca nuts, powd., bbls ..... lb. .18 • .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 • —
l-Arginine free base, dms., 10-kilo 5-kilo lots or more kilo.60.00 • —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 • —
l-Arginine monohydrochloride, dms., 5-kilo lots or more..kilo.60.00 • —
Arnica flowers (true Montana), bls. lb. 75 • —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 • —
bbls., c.l., works..... lb. .031 • —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. .48 • —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 • —
Light shades, bbls. ..... lb. 2.85 • —
Asafetida gum, cns ..... lb. .36 • .40
Powd., bbls., dms ..... lb. .75 • .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 • —
7D, c.l. (30 tons), mines ton.75.00 • —
7F, c.l. (30 tons), mines ton.71.00 • —
7H, c.l. (30 tons), mines ton.61.00 • —
7K, c.l. (30 tons), mines ton.50.00 • —
7M, c.l. (30 tons), mines ton.44.00 • —
7R, c.l. (30 tons), mines ton.43.00 • —
7RF, c.l. (30 tons), mines ton.44.00 • —
7T, c.l. (30 tons), mines ton.41.00 • —
7TF, c.l. (30 tons), mines ton.44.00 • —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 100-kilos. kilo. 6.35 • —
dms., less than 100-kilos kilo. 6.60 • —
Ash, black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 • —
ex-whse, 5 tons or more, N. Y., N. J ton.89.50 • —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.46.00 • —
270°-295°F. fusing pt., bgs., c.l., mines ton.43.00 • —
Petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 • —
85-300 penetration, tanks, tankwagon, refy ton.20.00 • —

Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. Nom.
Atropine sulfate, USP, bots, 10 oz. lots .. oz. 5.25 • —
Azelaic acid, bgs., c.l., dlvd ..... lb. .37 • —
bgs., ton lots, same basis ..... lb. .33 • —

B

Bacitracin, sterile, over 500,000,000 units 50,000 units. .90 • —
non-sterile, over 500,000,000 units, 50,000 units. .65 • —
Balm of Gilead buds, dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs lb. 1.00 - 1.10
Barbital, NF, 100-lb. dms., f.o.b. works lb. 4.50 • —
Barbital sodium, NF, 100-lb. dms. lb. 4.75 • —
Barium carbonate, precip., bgs., c.l., works ton.111.50 • —
bgs., smaller lots, works ton.126.50 • —
Barium chlorate, dms., works lb. .32 • .41
Barium chloride anhyd., bgs., c.l., works ton.176.00 • —
bgs., t.c.l., works ..... ton.196.00 • —
NF, cryst., dms., 400-lbs., works lb. .23 • —
Tech., cryst., bgs., c.l., works, 100 lbs. 7.00 • —
bgs., t.c.l., works 100 lbs. 8.00 • —
Barium chromate, bgs., frt. equald, lb. .38 • —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton.208.00 • —
bgs., t.c.l., t.l., frt equald ton.218.00 • —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs.11.25 • —
bgs., t.c.l., frt. equald 100 lbs.11.75 • —
Barium monoxide (see Barium oxide).
Barium nitrate bbls. c.l. t.l. dlvd lb. .16 • —
bbls., t.c.l., t.t.l., dlvd. .... lb. .17 • —
Barium oxide, grd., dms., c.l., t.l., frt equald ton275.00 • —
dms. t.c.l., t.t.l. frt equald ton.285.00 • —
Barium peroxide, dms. frt. equald, lb .20 • —
Barium stearate, ctns. c.l. frt. alld, lb. .41 • —
ctns., t.c.l. same basis ..... lb. .42 .46
Barium sulfate, tech (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19 • —
Barium sulfide, dms., c.l., works, ton.100.00 • —
dms., t.c.l., works ..... ton.110.00 • —
Barytes, southern off-color, bgs. mines ton 30.00 • —
95-75%, bgs., mines ton.30.00 • —
white, water-grd paper bgs., c.l. St. Louis ton.60.00 -60.25
paper bgs. ex whse., New York ton 84.85 • —
Battery acid, cbys., c.l., works E. 100 lbs. 2.35 • —
cbys, t.c.l., works, E.... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton 7.00 -10.00
Bay oil, NF, Puerto Rican 50-55% cns. lb. 4.00 • —
NF, Dominica, 50-55%, cns., dms lb. 4.25 • 4.50
Bayberry wax, bgs ..... lb. .63 • .70
Beeswax, crude, African, bgs... lb. .52 • .54
Brazilian, bgs. ..... lb. .56 • .57
Central American, bgs..... lb. .55 • .56
Chilean, bgs. ..... lb. .57 Nom.
Refd. USP, bleached white, bricks 100-lb. ctns lb. .67 • .69
white, slabs, 100-lb. ctns lb. .66 • .68
yellow, bricks, 100-lb. ctns lb .59 • .61
yellow, slabs, 100-lb. ctns lb. .58 • .60
Belladonna leaf, bls. ..... lb. .24 • .26
Belladonna root, bls..... lb. .35 • .38
Bentonite, dom 200 mesh, bgs., c.l., mines ton.14.00 • —
Imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton.95.20 • —
bgs., 1-ton lots, ex whse ton.99.00 • —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 • —
bgs., 1-ton lots ex whse ton.97.16 • —
Benzal chloride, cbys., works lb. .44 • —
Benzaldehyde, NF, dms..... lb. .74 • —
Tech., dms., c.l., t.l..... lb. .42 • —
dms., t.c.l. ..... lb. .44 • —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La. ....gal. .31 • —
Bethlehem, Pa. ....gal. .31 • —
Birmingham district..gal. .31 • —
Chicago district ....gal. .31 • —
Cleveland district ....gal. .31 • —
Geneva, Utah .....gal. .31 • —
Houston, Tex. .....gal. .31 • —
Johnstown, Pa. .....gal. .31 • —
Lorain, Ohio .....gal. .31 • —
Mennequa, Colo. .....gal. .31 • —
Philadelphia district..gal. .31 • —
Pittsburgh district ...gal. .31 • —
Port Arthur, Tex. ....gal. .31 • —
St. Louis, Mo. District gal. .31 • —
Sparrows Point, Md. ..gal. .31 • —
Syracuse, N. Y. .....gal. .31 • —
Terre Haute, Ind. ....gal. .31 • —
Youngstown, Ohio ....gal. .31 • —
Lackawanna, N. Y. ...gal. .31 • —
Lone Star, Tex. .....gal. .31 • —
Middletown, Ohio ....gal. .31 • —
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit, .0073- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0063- —
Tech., low gamma, bgs., c.l., t.l., consignment, dlvd gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 • —
bbls., t.c.l., same basis ..... lb. 1.21 • —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 • —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 • —
AAOT, bbls., dlvd. ..... lb. 2.55 • —
Lightfast, bbls., dlvd. ..... lb. 3.40 • —
Benzocaine, dms., 100-lbs., frt alld. lb. 3.25 • —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 • .37
dms., t.t.l., same basis..... lb. .29 • .41
tanks, same basis ..... lb. .21 • —
USP, bbls., dms., ton lots lb. .48 • —
bbls., dms., 1,000-lb lots lb. .50 • —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

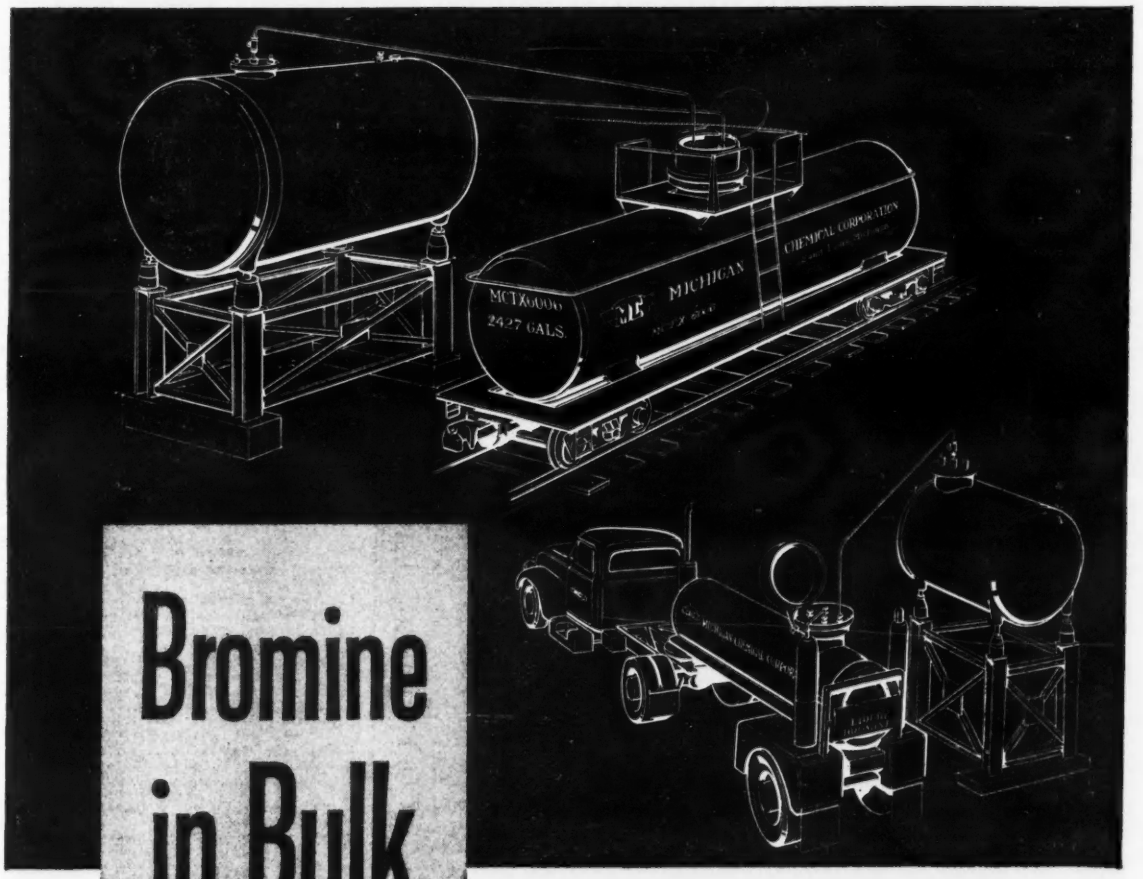
Benzoin gum, Sumatra, cs. ..... lb. .32 • —
Benzophenone, dms ..... lb. 1.35 • 1.46
Benzotriazole, tech, dms., 1,000-lb. lots, works lb. 1.93 • —
Benzotrichloride, cbys., 1,000-lb lots or more, frt equald lb. .21 • —
cbys., smaller lots, frt. equald .. lb. .23 • —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb. .32 • —
cbys., t.c.l., same basis lb .23 • —
tanktrucks, dlvd. Metropolitan area lb. .21 • —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots, works lb. .93 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .54 • —
Benzyl alcohol, NF, dms. ..... lb. .54 • —
Tech., dms., dlvd. ..... lb. .47½- .63
Benzyl benzoate, USP, 40-lb. dms. lb. .62 • —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 • —
dms., t.c.l., same basis ... lb .24 • —
tanktrucks, dlvd., Metropolitan area lb. .21 • —
Benzyl cinnamate, cns..... lb. 3.80 - 4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 • —
12-49 dms., same basis..... lb. 1.35 • —
1-11 dms., same basis..... lb. 1.90 • —
Benzyl formate, cns. ..... lb. 1.70 - 1.85
Benzyl isoeugenol, cns..... lb. 8.20 - 8.30
Benzyl propionate, bots..... lb. 1.30 - 1.35
Benzyl salicylate, bots ..... lb. 1.50 - 1.85
Benzylidine acetone, bots ..... lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate cns ... lb. 56.50 • —
Berberine hydrochloride, bots ... lb. 56.50 • —
Bergamot oil, nat., NF, Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).

BHC (see Benzene hexachloride, tech.).
Biotin, cryst. bots ... gram 10.00 • —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns..... lb 1.50 1.90
Rectified, cns. ..... lb 1.75 2.00
Bismuth chloride, jars ..... lb 5.11 —
Bismuth hydroxide, dms ..... lb 4.60 4.65
Bismuth metal bxs. ton lots lb. 2.25 • —
Bismuth nitrate, cryst., 200-lb. dm. lb. 2.25 • —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 • —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 • —
Bismuth subgallate, NF, 200-lb dm. f.o.b. works lb 3.98 • —
Bismuth subiodide fib dms lb 5.37 • —
Bismuth subnitrate, NF, 200-lb dm., f.o.b., works lb. 3.10 • —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 • —
Bismuth trioxide 100-lb. dms., f.o.b. works lb. 4.40 • —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.22 • —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb. .30½- —
bgs., c.l., t.l., less than 70,000-lbs., same basis lb. .31 • —
bgs., t.c.l., same basis ..... lb. .32½- —
Blackberry root bark, bls..... lb. .50 • .55
Blanc fixe, direct process, bgs. c.l. works ton 180.00 —
bgs., t.c.l., works ... ton 170.00 —
bgs., t.c.l., New York whse ton 215.00 —
Blood, dried 16-16½% ammonia, bgs., New York unit-ton 5.50 —
Bloodroot, bls. ..... lb. .80 • .85

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes).
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms lb 2.05 • —
Peruvian, dms. ..... lb 1.65 • —
BON acid maroons, pure, bbls lb 1.75 • —
Resinated, bbls. ..... lb 1.50 • —
Bonemeal, steamed, works, E ton.100.00 • —
Bone black, dms., c.l., frt. alld lb .1750- .2225
l.c.l., works ..... lb .1950- .2425
Pacific coast bone black prices 3¼c. per lb. higher.



Bromine in Bulk

Saves Dollars! Saves Time!

LOOK AT THESE ADVANTAGES: Thousands of dollars a year can be saved by converting facilities to receive bromine in bulk. For example, with tank car orders, you save 9½¢ a lb. as compared to the drum price; 10½¢ a lb. over bottles. With tank truck orders, you save 7¢ a lb. over drums and 8¢ a lb. over bottle shipments. You will free considerable capital now tied up in container deposits. Finally, you will save both time and money now used in handling the smaller bromine containers.

BULK STORAGE PAYS OFF FAST! If you use as little as 60,000 lbs. of bromine a year, delivered by tank truck, you can save the cost of the necessary 1000 gal. bulk-storage installation in about a year.

Tank cars are available in 60,000 lb. and 100,000 lb. capacities. Tank trucks contain 14,000 lbs. each.

WE CAN SHOW YOU HOW! Our experience in the storage and handling of bromine is extensive and we want to share it with you. If you would like engineering prints, specifications, and technical counsel, get in touch with us. Michigan Chemical also offers you these advantages: A steady, uncommitted supply of bromine at tonnage prices; and a large bromine bulk fleet for prompt service.

Bulk shipments from: El Dorado, Arkansas and Manistee, Michigan. Drums and bottles from Manistee and convenient warehouse locations.

C-59-1

For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION
641 North Bankson Street, Saint Louis, Michigan
EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N. Y.

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Bone phosphate defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate tribasic)
Borax tech anhyd., 99½%, bgs., c.l. works ton 92.00 - —
bgs. ton lots, ex whse. New York or Chicago 100 lbs. 7.67 - —
Tech., anhyd., 99½%, bgs., smaller lots, same basis 100 lbs. 8.91 -10.91
bulk c.l. works ton 83.00 —
Tech., gran., decanydrate, 99½%, bgs., c.l., works ton 50.00 - —
bgs. ton lots ex whse. New York or Chicago 100 lbs. 5.31 - —
bgs. smaller lots, same basis 100 lbs. 6.56 8.56
bulk c.l. works ton 43.50 —
Tech., pentahydrate, 99½%, bgs., c.l. works ton 64.50 - —
bgs. ton lots ex whse. New York or Chicago 100 lbs. 6.12 - —
bgs. smaller lots, same basis 100 lbs. 7.37 - 9.37
bulk, c.l. works ton 58.00 —
USP powd. bgs. c.l. works ton 54.00 - —
bgs., ton lots, ex whse. New York or Chicago 100 lbs. 6.57 - —
bgs., smaller lots, same basis 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs. c.l., divd lb. 24 - —
bgs. l.c.l., same basis lb 26 - —
Boric acid tech anhyd 99.9% bgs. c.l works ton 335.00 - —
bgs. ton lots ex whse. New York or Chicago 100 lbs. 21.27 - —
Tech. annyd., 19%, bgs., smaller lots, same basis 100 lbs. 22.52 -24.52
cryst. 99.9% bgs. c.l. works ton 163.50 —
bgs. ton lots ex whse. New York or Chicago 100 lbs. 11.67 - —
bgs. smaller lots same basis 100 lbs. 12.92 -14.92
dms. c.l., works ton 185.50 —
dms., ton lots ex whse., New York or Chicago 100 lbs. 13.17 - —
dms., smaller lots, same basis 100 lbs. 14.42 - —
gran., 99.8%, bgs., c.l., works, ton 112.00 - —
bgs. ton lots ex whse New York or Chicago 100 lbs. 8.78 - —
bgs smaller lots same basis 100 lbs. 10.03 -12.03
dms. c.l. works ton 137.00 —
dms. ton lots, ex whse. New York or Chicago 100 lbs. 10.29 - —
dms. smaller lots same basis 100 lbs. 11.54 - —
bulk c.l. works ton 106.00 —
powd., bgs., ton lots, ex whse., New York or Chicago 100 lbs. 9.20 - —
bgs., smaller lots same basis 100 lbs. 10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs. 10.71 - —
dms., smaller lots, same basis 100 lbs. 11.96 - —
USP boric acid $25 per ton higher in bags
Borneol, cns. lb 2.75 - —
Boron trichloride CP 1,800-lb. cyls., works lb 1.25 - —
100-lb cyls works lb 1.70 - —
Boron trifluoride gas, cyls., works lb. 70 - —
cyls., l.t.l. works lb. 70 - —
Brimstone (see Sulfur).
Broenner's acid bbls lb 1.53 - —
Bromine purif., cs. c.l., t.l., divd. E of Rockies lb. 32 - —
cs. l.c.l. same basis lb 34 .39
ret. dms., c.l., t.l., divd. E. of Rockies lb. .31 - —
ret. dms. l.c.l. same basis lb. 31 .34
tanks, same basis lb. 21½ - —
Bromochloromethane dms. c.l., frt. equald lb. 48 - —
dms. l.c.l., same basis lb. 50 - —
tanks, same basis lb 47 - —
Bromoform, pharmaceutical grade, 5-gal chy. frt. equald lb 1.95 - —
Bromstyrol nots lb 5.25 5.35
Brucine, cns. oz. 1.10 - —
Brucine sulfate, NF, cns. oz. .65 - —
Buchu leaves, bbls lb. .60 - .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example prices on Brown iron oxide, may be found in the I's under Iron oxide brown.

Butadiene retd cyls. c.l., refy lb 21 —
cyls. l.c.l., refy lb. 22 —
tanks, divd lb. 12¾ —
Butene 1 tanks works lb .0825 —
Butene 2 tanks works lb. .0570 —
n-Butyl acetate ferment, dms., c.l., frt alld lb. .17 —
dms., l.c.l., same basis lb. 18½ —
tanks, same basis lb. 14½ —
n-Butyl acetate, syn., dms., c.l., divd. E lb. .17 - —
dms., l.c.l., same basis lb. 18½ —
tanks same basis lb. 14½ —
sec-Butyl acetate syn dms., c.l., divd E lb. 14¾ —
dms., l.c.l. same basis lb. 16¼ —
tanks, same basis lb. 12¼ —
n-Butyl acrylate dms. c.l. or t.l., straight or mixed frt. alld. E lb. .37½ —
dms., l.t.l., same basis lb. 38½ —
tanks, same basis lb. 35 -
n-Butyl alcohol ferment. dms., c.l., frt alld lb. .18 - —
dms., l.c.l. frt alld lb. 19½ —
tanks frt alld lb. 15½ —
Syn., dms., c.l., divd. E lb. .17 - —
dms., l.c.l., frt. alld lb. 19½ —
tanks, frt. alld lb. 15½ —
Sec-synthetic dms., c.l., divd lb. 15 - —
dms., l.c.l., divd. lb. 16½ —
tanks divd lb. 12½ —
Tert-synthetic, dms., c.l., frt. alld., divd. E lb. .16 - —
dms., l.c.l., same basis lb. 17½ —
tanks, same basis lb. 13½ —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms. c.l. works lb. 37½ —
dms., l.c.l. works lb. 38¼ —
n-Butyl ether dms., c.l., works lb. 35¼ —
dms., l.c.l., works lb. 36 —
tanks, works lb. 33¼ —
Butyl lactate dms. c.l. frt alld E. Rockies lb. 42½ —
dms. l.c.l., same basis lb. 43½ —
tanks, same basis lb. 40 —
Butyl laurate dms. works lb. 37½ —
Butyl methacrylate dms., c.l., t.l., works lb. 55 —
dms. l.c.l. works lb. 55½ —
Butyl oleate refd. dms., l.c.l., works lb .32 —
Butyl phenylacetate, dms. lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, CP, dms., l.c.l., frt. alld, E. of Rockies lb. .27¼ -
tech., dms., c.l., same basis lb. .25¾ -
Butylamine (see Mono- Di- and Tri-butylamine).
tert-Butylamine, dms. c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ -
tc., t.t., same basis lb. 45 - —
Butylated hydroxyanisole, food grade, dms. divd lb 4.75 - —
6-tert-Butyl m creso (see Mono-tert-butyl m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert butyl p cresol)
1,3 Butylene glycol, dms. c.l., t.l., divd lb. 20½ —
dms., l.c.l., t.t.l., f.o.b works lb. .22 —
tanks divd lb .18 —
p-tert-Butylphenol, bgs., c.l., frt. alld lb. .25½ —
bgs., l.c.l., same basis lb. .26½ -
tanks, same basis lb. .23½ -
Butyraldehyde, dms., c.l., divd lb. .22 —
dms., l.c.l., divd. lb. .23½ —
tanks divd lb. .19½ —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ —
tanks, same basis lb. .32½ —
Butyric ether (see Ethyl butyrate).
Butyrolactone dms., c.l. t.l., works lb. .40 - —
dms., l.c.l., same basis lb 43 —
n-Butyronitrile, dms., c.l., divd lb. .56½ -
dms., l.c.l., divd. lb. .57½ -
tanks, divd. lb. .54 -

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld E of Rockies lb 5.55 - —
Light shade bbls same basis lb 4.65 - —
Medium shade, bbls., same basis, lb. 5.30 - —
Medium, light shade, bbls., same basis. lb. 4.90 - —
Orange-red shade, bbls same basis lb 4.30 - —
Yellow all shades bbls frt alld E. of Rockies lb. 3.02 - —
Cadmium chloride, 400-lb dms., f.o.b. shipping point lb. 1.56½ - —
Cadmium iodide, 25-lb fib dms in b 75 4.00
Cadmium metal scrods or sticks, ton lots, cs. divd lb. 1.60 - —
Cadmium nitrate purif cry t. 400-lb dms., less than 5,000 lbs. f.o.b shipping point, lb. .94 - —
400-lb dms. 5,000 lbs or more same basis lb. .90 - —
Cadmium mercury lithopone orange, deep shade bbls frt alld E. of Rockies lb. 1.73 - —
Cadmium-mercury lithopone red, dark shade, bbls same Basis lb. 2.03 - —
Red, light shade bbls. same basis lb. 1.80 - —
Red, medium shade bbls same basis lb. 1.95 - —
Red, medium light shade bbls same basis lb. 1.88 - —
Red, maroon shade bbls same basis lb. 2.11 - —
Cadmium-selenide lithopone medium, bbls., frt alld E. of Rockies lb. 2.84 - —
Orange, bbls., same basis lb. 1.66 - —
Cadmium-selenide lithopone red, orange-red shade bbls. same basis lb. 1.80 - —
Red dark shade bbls. same basis lb. 2.64 - —
Red, light shade, bbls. same basis lb. 1.96 - —
Red, medium shade, bbls same basis lb. 2.31 - —
Red, medium-light shade bbls same basis lb. 2.08 - —
Cadmium selenide, lithopone, yellow, all shades bbls frt alld E. of Rockies lb. 1.27 - —
Caffeine NF citrated dms. 400 lb lots or more lb 2.70 - —
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld lb. 2.25 - —
hydrous, powd., 150-lb. dms., frt. alld lb. 2.25 - —
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb. 2.40 - —
Cajuput oil, native cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb 34 —
Calamus oil bots lb 12.00 -20.00
Calciferol cryst. 10 kilo or more lots works gram 54 - —
1-10 kilo lots gram 55 - —
Calciferol in edible oil (see Viosterol).
Calcium p aminosalicylate trihydrate fib dms 100 lbs or more frt adjusted lb 3.10 - —
Calcium bromide NF tars 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size, 600 lb dms. c.l. divd ton 149.00 - —
Calcium carbonate nat. dry grd., air floated, 325 mesh, ngs. c.l works ton 10.50 —
Chalk, whiting, 325 mesh, bgs., c.l., works ton 32.00 -34.00
water-grd. ½ to 10 microns bgs., c.l. works ton 30.00 —
10 to 20 microns bgs., c.l. works ton 17.00 -18.00
Precip., dense, bgs., c.l., works, ton 30.00 -38.50
bgs. c.l., works ton 45.00 53.50
medium bgs c.l. works ton 38.00 —
bgs. c.l works ton 48.00 -53.00
Surface treated, bgs., c.l., works, ton 42.00 -44.00
bgs., c.l., works ton 57.00 59.00
ultrafine bgs c.l. works ton 117.50 167.50
bgs l.c.l works ton 137.50 187.50
Calcium chloride conc flake or pellet 94-97% paper bgs., c.l works frt equald ton 39.30 - —
Flake, 77-80% paper bgs., c.l., works frt equald ton 32.00 - —
Liquor 40% tanks frt equald ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 38.00 - —
Purit. grad dms lb 27
Solid, 73-75%, dms., c.l., frt. equald ton 30.50 - —
dms. l.c.l works frt equald ton 36.00 -73.00
USP gran. dms. lb 32 —
Calcium chromate, bgs. divd lb .37 —
Calcium cyclamate 100-lb dms lb 1.95 —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½ -
USP. powd., 100-lb dm., ton lb. .66¼ -
Calcium hydride, lump, dms, works, lb. 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., divd E. of Rockies cs. 27.50 - —
100-lb. dms., same basis dm. 39.50 - —
Calcium hypophosphite, dms, 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works, lb. 4.27 - —
Calcium lactate NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 1.25
Calcium phosphate dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton. 81.00 - —
bgs. c.l., t.l., f.o.b Texas City works ton 75.50 - —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton. 97.65 - —
bgs., l.c.l. frt equald ton. 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs. c.l. prices.
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.45 - —
bgs. smaller lots same basis 100 lbs. 7.95 - —
Tribasic, NF, precip. bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l., frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., divd E. of Rockies, lb. .37 - —
Prices W of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs. or more f.o.b. warehouse N Y lb. .39 - —
Calcium resinate, precip. dms., frt. alld., works lb. .45 - —
Calcium silicate hydrated bgs., c.l., works lb. .06 - —
bgs. l.c.l., works lb. .06½ -
Calcium silicate paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l lb. .40 - .44
Calomel NF mild, powd. dms., 100-lbs., f.o.b works lb 4.32 - —
NF mild, precip., dms., 100-lbs., f.o.b works lb. 5.67 - —
Camphene 46° m.p. dms incl., c.l., works lb. .15 - —
dms incl., l.c.l. same basis lb. .16½ -
tanks same basis lb. .12½ -
Camphene chlorinated 67-69% (see Toxaphene)
Camphor monobromated NF dms., kgs lb. 3.63 3.70
Camphor, syn. tech., 1 bbl. or more, lb. .45 - —
USP, powd., bbls., 1,000-lb. lots lb. .56 - —
bbls., smaller lots lb. .57 - —
tablets, ctns., 1,000-lb. lots, lb. .80 - —
ctns., 500-lb. lots lb. .81 - —
ctns., smaller lots lb. .82 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb 5.00 6.50
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs lb. .57 - .58
Refd., pure, bgs lb. .62 - .63
Powdered Candelilla wax 20 to 100 mesh, 8c higher
Cantharides, Chinese, cs. lb 1.00 - —
powd., bgs. lb 1.15 - —
Russian bgs. lb 2.00 2.15
powd., bgs. lb 2.15 2.30
Caprie acid, dms lb. .27¼ - .29¾
tanks lb. .24¾ -
Caprolactam monomer, bgs., c.l., t.l., f.o.b works lb. .52 - —
bgs., l.c.l., t.t.l., same basis lb. .57 - —
tanks, same basis lb. .49 - —
Caprvl alcohol 85% dms., c.l., t.l., works lb. .19 - —
dms., t.t.l., same basis lb. .19½ -
tanks, frt. equald. lb. .16½ -
Sec 92-99% dms. c.l. f.o.b. works lb. .22 - —
dms. l.c.l., f.o.b. works lb. .23 - —
tanks, f.o.b works lb. .19½ -
Caprylic acid, dms lb. .27¼ - .29¾
tanks lb. .24¾ -
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin NF, from dom. pepper, dms lb 4.00 - —
NF from African pepper, dms. lb 4.50 - —
Caraway oil, NF, dms lb. 4.25 - 4.50
Caraway seed Danish, bgs. lb. .16 —
Dutch, bgs. lb. .15½ -
Carbazole, 97%, bbls, ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .08 - —
bgs., c.l., works lb. .08½ -
bgs., l.c.l., works lb. .16¼ -
furnace, fast extruding, bgs., c.l., works lb. .08¾ -
ctns, l.c.l., whse lb. .13½ -
high abrasion, bulk, c.l., works, lb. .07¼ -
bgs., c.l., works lb. .07¾ -
bgs., l.c.l., divd. or whse lb. .14½ -
high modulus, bgs., c.l., works lb. .08¼ -
ctns., l.c.l., whse lb. .13 - —
semi-reinforcing, bgs., c.l., works, lb. .05¾ -
bgs., ctns., l.c.l., whse lb. .12½ -
pigment, high color beads, ctns., c.l., works lb. .28 - —
ctns., l.c.l., divd. or whse lb. .87 - —
medium color, uncompressed, bgs., c.l., works lb. .14 - —
bgs., l.c.l., divd. or whse lb. .22½ -
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., divd. Metropolitan areas, E ton. 60.00 -115.00
bulk, 3,000,000 lbs or more, divd Metropolitan areas, E ton. 55.00 - —
Solid, bulk, wholesale works ton 85.00 - —
Carbon disulfide, 55-gal dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms. l.c.l. same basis lb. .086 - .091
5-gal dms., 30 dms to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, f.o.b. works lb. .0450 -
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld. lb. .12¾ -
dms., l.c.l., frt. alld. lb. .15¼ -
Tech., consumers dms., c.l., t.l., frt. alld lb. .11¾ -
dms., l.c.l. t.t.l. frt. alld lb. .14¼ -
tanks, frt alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms., 100-lb lots, works lb. 4.00 - 4.25
dms. smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots lb. 40.00 -43.00
Cardamom seed, bleached "A" lb. 3.25 - —
Bleached "B" lb. 3.05 - —
Decorticated Alleppey, cs. lb. 2.55 - —
Guatemala, cs. lb. 1.95 - —
Green, Alleppey, bgs. lb. 1.90 - —
Ceylon, bgs. lb. 2.10 - —
Carmine No 40, NF, bulk, 100-lb. lots or more, divd. lb. 16.80 - —
bulk, smaller lots, divd. lb. 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots, lb. .66 - —
North Country, No 2, crude, bgs., ton lots lb. .73 Nom.
refd., pure, ton lots lb. .76 - .77
North Country, No. 3, Ceara, crude, ton lots lb. .57 - .58
North Country, No 3, Parnahyba, crude, ton lots lb. .60 - .62
No. 3, refd., pure, bgs., ton lots, lb. .66 - .68
No. 1, Ceara, yellow, bgs., ton lots, lb. .87 - .88
Parnahyba, yellow, bgs., ton lots, lb. .90 - .91
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.
Carotene tech 1,350,000 A units per gram tins, 5-10 kilo lots, divd gram, .20½ -
in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms., works million units, .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., divd million units, .144 - —
b-Carotene in vegetable oil, sea, solid suspension 400,000 A units per gram cns kilo. 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns kilo. 240.00 —
Carvol, bots. lb. 5.00 5.40
Cascara sagrada bark, bulk lb. .32 - —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more works lb. .56 - —
80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock Eastern seaports lb. .18¾ - .19¼
Australian, bgs., c.l., same basis lb. .21¼ -
New Zealand, same basis lb. .24 - .25
Cashewnut shell liquid, treated, dms. c.l., Newark, N.J lb. .24 - —
dms. ton lots, same basis lb. .25 - —
t.w., same basis lb. .22½ -
Cassella acid dms frt alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns. lb. 6.50 - 8.00
Cassia, Padang, "A," bls lb. .31 - —
"B," bls. lb. .30 - —
"C," bls. lb. .29 - —
Korintje "A," bls. lb. .31 - —
"B," bls. lb. .29 - —
"C," bls. lb. .27 - —
Castor oil, dom., blown, dms., c.l. lb. .2550 —
dms., l.c.l. lb. .2650 —
dehydrated, bodied, dms., c.l. lb. .2700 —
dms. l.c.l lb. .2830 —
tanks lb. .2500 —
dehydrated, unbodied, dms., c.l. lb. .2500 —
dms., l.c.l. lb. .2660 —
tanks lb. .2360 —
hydrogenated, bgs., c.l. lb. .2475 —
bgs., ton lots lb. .2875 —
bgs., l.c.l., divd lb. .3075 —
raw, No. 1, dms., c.l. lb. .2200 —
dms., l.c.l lb. .2300 —
tanks lb. .2000 —
No 3, tech., dms., c.l. lb. .2125 —
dms., c.l., lb. .2225 —
tanks lb. .1925 —
refd., deod., dms., c.l. lb. .2750 —
dms. l.c.l. lb. .2850 —
tanks lb. .2150 —
USP, dms. c.l. lb. .2350 —
dms., l.c.l lb. .2450 —
tanks lb. .2150 —
Imported, No. 1, Braz., tanks, New York lb. .17¾ - .18
No. 3, tanks, same basis lb. .17¼ - .17½
Sulfonated, 50%, dms., works lb. .15 - .15½
75% dms. works lb. .19 - .19¼
Castor oil acids, dehydrated, dms. lb. .41¼ - .43¼
Split, dms. lb. .33¾ - .34¾
Castor pomace, bgs., c.l., works ton 35.00 —
Castoreum nat., cns. lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½ —
Resub., dms., works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic)
Cedarleaf oil, USP XIII cns., dms. lb. 3.50 - 4.00
Cedarwood oil, cns., dms. lb. 1.25 - —
Celery seed oil lb. 11.50 - —
Celery seed, French, bgs lb. .36 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., bgs., t.l., divd E lb. .36 - .51
Cellulose acetate-butyrate powd., 17% butyryl content, bgs., divd E lb. .545 .555
27% butyryl content, bgs. divd. E lb. .595 .605
38% butyryl content, bgs., divd. E lb. .545 - .555
38% butyryl content, half-second, bgs., divd. E. lb. .545 - .555
50% butyryl content ngs. divd. E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
Cellulose gum, pure, high vis., bgs. smaller lots, same basis lb. .59 - —
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E lb. .57 - —
bgs., ton lots, frt. alld. E lb. .59 - —
(Cellulose gum prices 1c. per lb. higher in west.)
Cerium hydrate 74% CeO, fib dms., 100-lb lots or more lb. 1.40 - —
77% CeO, fib dms., 100-lb lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, divd. lb 1.85 1.90
bgs., smaller lots, divd. lb 2.15 —

BENZOIC ACID
MALEIC ANHYDRIDE
BENZOIC ACID
MALEIC ANHYDRIDE
BENZOIC ACID
MALEIC ANHYDRIDE

. . . . . NOW ON STREAM BY—

HEYDEN CHEMICAL DIVISION
HEYDEN NEWPORT CHEMICAL CORPORATION

FINE HEYDEN CHEMICALS

Cetyl alcohol, NF, fib, cns., c.l., t.l., dlvd, E lb. .41½- —
fib, cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .39 · —
Extra, cns., c.l., t.l., dlvd, E lb. .48½- —
fib cns., l.c.l., same basis lb. .50½- —
tanks, same basis lb. .46 · —

Chalk (see Calcium carbonate).

Chamomile flowers, Hungarian, lb. .95 - 1.10
Roman, cs. lb. 1.75 - 2.00

Chamomile oil, blue Hungarian, bots lb. 350.00 · —

Charcoal, activated, NF, fib dms., c.l., works lb. .34 · —
fib, dms., 5-ton lots, works lb. .35 · .35½
fib dms, smaller lots, works lb. .36 · .59

Charcoal, black (see Charcoal, activated).

Charcoal, bone (see Bone black).

Charcoal, hardwood, lump, bulk, c.l., f.o.b. plant ton 55.00 · —
briquets, bulk, c.l., f.o.b. plant ton 80.00 · —
5-lb paper bgs, c.l., same basis ton 106.00 · —
20-lb paper bgs, c.l., f.o.b. plant, ton 90.00 · —
40-lb paper bgs, c.l., same basis ton 86.00 · —

Chenopodium oil, NF, cns lb 4.75 5.00

Chicago acid paste, bbls, frt alld, lb 3.21 · —

Chinawood oil (see Tung oil).

Chloral, tech, 94% min, dms., c.l., works lb .23 · —
dms., l.c.l., works lb .24 · —
tanks, multiple units, 5 cars, dms, l.c.l, works lb. .21 · —

Chloral hydrate, USP, jars, 1,000-lb lots lb 1.00 · —
jars, 500-lb lots lb 1.03 · —
jars, 100-lb lots or less lb 1.05 · —

Chlordan, agricultural, dms., c.l., frt alld lb 65 · —
dms, t.c.l, 5,000-10,000-lb lots, frt alld lb. 66 · —
clarified, dms., c.l., frt. alld lb. .69 · —
dms, t.c.l, 5,000-10,000-lb. lots, frt alld lb 70 · —

Chlorinated paraffin, 40%, dms., c.l., frt alld lb. .15 · —
dms, t.c.l, 10 dms or more, same basis lb. .16 · —
70%, dms., c.l., same basis lb. .18½ · —
dms, t.c.l, 10 dms or more, same basis lb. .19½ · —

Chlorinated rubber, 5, 10, 20 cps., ctns, c.l, works lb 60 · —
ctns., l.c.l, works lb 61 · —
125 cps, ctns, c.l., works lb. 70 · —
300 cps, ctns, c.l., works lb. .80 · —

Chlorine, liq., cyls, c.l., works, frt equald lb. .11 · —
cyls., l.c.l., Metropolitan area, same basis lb. .12½- .13¾
tanks, single units, works, frt equald 100 lbs 3.25 · —
tanks, multiple units, 5 cars, works, frt, equald, same basis 100 lbs. 4.15 · —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 · —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 7.25

Chloroacetic acid, mono, flake, 99%, purif, dms., c.l lb. .23½ .25¼
dms, l.c.l lb 24½ —
tech, flake, 96-97%, dms., c.l., frt, equald lb. .19 · —
dms, l.c.l, frt equald lb. .20 · —

2-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb 1.03 · —

4-Chloro-2-aminotoluene, fused, bbls, lb 1.38 · —

6-Chloro-2-aminotoluene, tech., liq., dms, frt alld lb. .66 · —

m-Chloroaniline, dms, c.l., frt alld, lb. .75 · —
dms., l.c.l., same basis lb. .77 · —
tanks, same basis lb. .73 · —

o-Chloroaniline, dms., c.l., frt. alld, lb. .52 · —
dms., l.c.l., same basis lb. .54 · —
tanks, same basis lb. .50 · —

p-Chloroaniline, dms., c.l., frt. alld, lb. .77 · —
dms, l.c.l, same basis lb. .79 · —

o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 · —
dms, t.t.l., same basis lb 1.20 · —

p-Chlorobenzaldehyde, dms., l.c.l., works lb 1.95 · —

o-Chlorobenzoic acid, fib, dms., t.l., works lb 1.10 · —
fib, dms., smaller lots, works lb 1.25 · —

p-Chlorobenzoic acid, fib dms., 2,000-lbs or more, works lb. 2.25 · —
fib, dms., less than 2,000-lbs., same basis lb 2.30 · —

Chloroform, tech., dms., c.l., dlvd, E lb. .18 · —
dms., l.c.l., same basis lb. .19 · —
tanks, same basis lb. .17 · —
USP, dms., c.l., dlvd lb. .27 · —
dms., l.c.l., dlvd lb. .30 · —
tanks, minimum 4,000 gals dlvd, lb. .25 · —

3-Chloro-4-nitroaniline, paste, dlvd, E., 100% basis lb. .90 · —
Powd., dlvd, E., 100% basis lb. 1.00 · —

4-Chloro-2-nitroaniline, powd, dlvd, E lb. .86 · —

4-Chloro-2-nitrophenol, tech., paste, dms, frt alld lb. .75 · —

4-Chloro-2-nitrotoluene, tech., solid, dms., frt alld lb. .99 · —

5-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 · —

o-Chlorophenol, dms, c.l., frt, equald lb .37 · —
dms, l.c.l, same basis lb .38 · —

p-Chlorophenol, dms., c.l., frt equald lb .37 · —
dms, l.c.l, same basis lb. .38 · —

Chloropicrin, coml., cyls., 180 lbs., frt alld lb 1.07 · —
cyls., 100 lbs., same basis lb 1.08 · —
cyls., 50 lbs., same basis lb 1.14 · —

Chlorosulfonic acid, dms., c.l., frt equald lb 04@5 · —
dms, l.c.l, frt equald lb 05@15 · —
tanks frt equald lb 04@15 · —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher

5-Chlorotoluene, tech, dms., t.l., works lb .37 · —
dms, l.c.l., t.l., same basis lb .38 · —

Choline bitartrate, 100-lb. dms., frt equald lb. 1.25 · —

Choline chloride, 100-lb dms., frt, equald lb 1.25 · —

Choline dihydrogen citrate, 100-lb dms, frt, equald lb. 1.25 · —

Chrome green, CP, dark, light, medium blue content, 1-15%, bbls., dlvd, E, of Rockies, lb. .43 · —
blue content, 16-30%, bbls., same basis lb. .44 · —
41-45%, bbls., same basis, lb. .44 · —
blue content, 45-49%, bbls., same basis lb. .45 · —
reduced color 25%, bbls., same basis lb. .20 · —

Chrome green prices 1c. higher W. of Rockies.

Chrome orange, CP, bbls., dlvd, E, of Rockies lb. .35 · —

Chrome orange prices 1c higher W. of Rockies.

Chrome yellow, CP, bbls., dlvd, E, of Rockies lb. .35 · —

Chrome yellow price 1c. higher W. of Rockies

Chromic acid, 99¾%, dms., c.l., works, frt, equald lb. .29½- —
dms., t.c.l., dlvd, N. Y. Metropolitan area lb. .30 .31

Chromic acid, NF (see Chromium trioxide)

Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works, lb. .10 · —

Chromium fluoride bbls, works lb. .51 · .52

Chromium oxide, hydrated, bbls., fib dms, c.l, frt, alld, lb. 1.20 · —
Pure, bgs., c.l., frt alld lb. .44½- —
bgs, l.c.l, same basis lb. .45¼- —

Chromium trioxide, NF, bots lb. 1.15 —

Cinchona bark, NF, red, broken, bgs lb. .25 · —
NF, yellow, broken, bgs lb. .35 .40

Cinnamic acid, refd, bots lb. 2.50 3.50

Cinnamic alcohol, bots lb. 1.30 1.60

Cinnamic aldehyde, dms. lb. .80 1.00

Cinnamon, Ceylon, No. 2, bgs, lb. .58 · —
Ceylon, No. "0000," bgs lb. .67 · —

Cinnamon bark oil, bots lb. 5.00 - 7.00

Cinnamon leaf oil, crude, dms lb 1.60 2.00

USP (Cassia), cns., dms lb 8.50 - 13.50

Citral, CP, bots lb 4.50 - 5.00
Extra, bots lb 3.60 5.00

Syn., dms lb 7.25 7.40

Citric acid, USP, anhyd., fine gran., bgs, dms., c.l lb. .29½ .30
bgs, dms, 10,000-lb lots, 1 shipt lb. .30 .30½
bgs, dms, smaller lots lb. .30½- .31

USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28½
bgs, dms, 10,000-lb lots, 1 shipt lb. .28 .28½
bgs, dms, smaller lots lb .29 .29½
Powdered citric acid ½c per lb higher

Citronella oil, Ceylon, dms lb. 1.05 · —
Java-type, dms. lb. .90 - 1.00

Citronellol, bots, dms. lb 1.90 2.50
Synthetic, dms. lb. 1.70 —

Civet, artif., bots lb. 13.75 15.00
Nat., bots oz 8.50 15.00

Clay, ball, dom., airfloated, bgs., c.l, Tenn ton 17.50 21.50
crushed, shed moisture, bulk, c.l., Tenn ton 8.00 - 11.25
imp, airfloated, bgs, c.l, Atl port net-ton 43.00 47.00
lump, bulk, Atl port net-ton 31.50 37.50

Clay, China, dom., dry grd, airfloated, 99%, 325 mesh, Georgia, bgs., c.l., works ton 11.00 - 17.00
Georgia, bgs, l.c.l, works ton 13.50 - 22.50
Imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton 23.00 - 35.00
white powd, bgs c.l, ex dock net-ton 50.00 —
bgs, l.c.l, ex whse net-ton 60.00 - 70.00

Cleaners naphtha, petroleum, 105° F Flash, tankcars New Jersey and New York gal. 18 —
Group 3 gal. 12@75 —
Houston, Texas gal. 145 —
140 F Flash, tankcars, New Jersey or New York gal. .205 · —
Group 3 gal. .154 · —
Houston, Texas gal. .17 · —

Cleve's acid, tech, mixed, solid, dms, frt alld lb 1.05 · —
1.6 tech, solid, dms, frt, alld lb 1.77 · —
1.7 tech., dms, frt, alld, lb. 2.42 · —

Clove bud oil, USP, dms. lb. 2.65 · —

Cloves, Madagascar, bgs lb. .33 · —
Zanzibar, bgs. lb. .37 · —

Clove leaf oil, crude, dms lb. 1.10 · —

CMC, crude, 96.4% low or medium vis, bgs., 23,000 lbs., dlvd, E., 100% basis lb. .40 · —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd, E., 100% basis lb. .42 · .46
65% low or medium vis, bgs., c.l., dlvd E, 100% basis lb. 40 · —
l.c.l., dlvd E., 100% basis lb. 42 1.00

CMC, purif, high vis, (see Cellulose gum). CMC prices W. of the Rockies are ½c. per lb higher and are on a dlvd. basis.

Coaltar, crude, resale tot, soln., tanks, works gal. .17 —

Refd, resale, indust, dms, c.l., ex whse gal. .35 · —
dms., t.c.l., ex whse gal. .39 · —
tanks works gal 20½- —

Coaltar pitch, aluminum, bulk, Works ton 42.00 · —
Carbon, bulk works ton 42.00 · —
Indust., bulk, works ton 44.00 · —
Core, bulk works ton 40.50 · —
Fiber, bulk works ton 48.00 · —
Roofing, 140-155 F., Federal Specification R-P-381, Type I tanks, works ton 41.00 · —

Cobalt acetate, 25% Co., dms. dlvd lb 1.04 · —

Cobalt blue, genuine, 250 lb bbls, dlvd E of Rockies lb 4.90 · —

Cobalt blue prices 1c higher W of Rockies

Cobalt blue, imitation (see Ultramarine blue).

Cobalt carbonate, 48% Co, powd., bgs., dlvd lb 1.45 · —

Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 · —

Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 · —

Cobalt linoleate, fused, 8½% Co., dms lb. 71½- —
Liq, 6% Co, dms lb. 57½- —

Cobalt metal, 99% dms, f.o.b carrier lb 1.50 · —

Cobalt naphthenate, liq, 6% Co., dms, dlvd lb. 48¾- —

Cobalt nitrate, 20.1% Co, bbls, dlvd, lb. .75 · —

Cobalt oxide, black, ceramic grade, 72½-73½% Co, kgs., dlvd E of Mississippi R. lb. 1.15 · —
70-71% Co, kgs, same basis lb 1.12 · —

Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.

Cobalt phosphate, powd, 42.1% Co., dms., dlvd lb. 1.35 —

Cobalt resinate, fused, 5% Co., dms. lb. .38½- —

Cobalt sulfate, cryst., 21% Co., dms., dlvd lb. .64 · —

Monohydrated, 33% Co., dms., dlvd lb. 1.09 · —

Cobalt tallate, 6% Co., dms, dlvd, lb. .44 · —

Cocaine, USP, cns., 100-oz. lots, f.o.b. works oz. 17.50 · —

Cocaine hydrochloride, cns, 100-oz. lots, f.o.b. works oz. 13.75 · —

Cocillana bark, bls lb .18 .20

Cocoa butter, bgs. lb. .54 · .59

Coconut oil, crude, tanks, New York, lb. .12⅜- .12½
tanks, Pac. coast lb. .11½- —
Refd., deodorized, dms., N.Y., lb. .19 · .20

Coconut oils, acid, dist, dms., lb. .21½- .24
tanks lb. .19 · —
double dist. (stripped), dms., lb. 22½- .25
tanks lb. .20 · —

Cod oil, dms., spot lb. .08⅛- .08⅜

Codeine, NF, cns., 100-oz lots oz. 13.25 · —

Codeine hydrochloride, cns, 100-oz. lots oz. 11.75 · —

Codeine phosphate, USP, cns., 100-oz lots oz. 10.25 · —

Codeine sulfate, USP, cns, 100-oz lots oz. 10.75 · —

Codliver oil, USP, dms gal 1.40 1.70

Cohosh root, black, bls lb .20 .25
Blue, bls lb .20 .25

Colchicine, USP, bots. 27.50 - 29.00

Colchicum root, bls lb .35 .45
Colchicum seed, bgs. lb. .85 .90

Collodion, USP, dms. lb. .32½- —
USP, flexible, dms lb .34 —

Colocynth, pulp, bls lb .73 —

Colombo root, bls lb .16 .18

Condurango, bark, bls lb 18 .20

Congo copal gum, No. 1, bgs lb. .26 · .27
No. 2, bgs. lb. .50 · .55
No. 3, bgs. lb. .22 · .25

Copaiba balsam, cns., dms lb. .85 · .95

Copaiba oil, cns lb 1.35 2.00

Copper acetate, bbls, c.l., works, lb. .53 —
bbls, l.c.l, works lb. .54 —

Copper carbonate, 55%, dark dense, c.l., works lb. .354⅝- —
bgs., l.c.l., works lb. .369⅝- —

Copper chloride, cupric, anhyd., dms., works lb. .44½- .45
cryst., dihydrate, dms., works, lb. .30¾- .31¼
cryst., dried, dms., works lb. .38¾- .39¼
cuprous, dms., works lb. .399⅝- .4295

Copper cyanide, tech, dms, 20,000-lb lots or more lb. .609 —
dms, 1,000-lb lots or more lb. .619 —
dms, smaller lots lb. .639 .65

Copper gluconate, dms lb 3.20 —

Copper hydrate, dry, dms, c.l., frt, E of Miss lb. .52½- —
dms., l.c.l., same basis lb. .53 · —

Copper metal, electrolytic, dlvd, Valley, basis lb. .31 · —

Copper naphthenate, liq, 8% Cu, dms, frt alld lb. .26½- —

Copper nitrate, tech, cryst, dms., works lb. .30¾ .32¾

Copper oleate, solid, 9% Cu, dms., works lb. .45 —

Copper oxide, black, bbls, 100-5,000-lb. lots, works lb. .47 · —
red., 97%, USN, Type 1, bbls., 100-5,000 lbs, lots lb. .47½- —
90% USN, Type II, bbls, 100-5,000-lb lots or more, works lb. .45½- —

Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 —
10% active quinolinolate, dms lb 1.14 1.15

Copper resinate, precip, dms., frt, alld lb. .47 · —

Copper sulfate, CP, gran., dms., works lb. .1885- —
Cryst., 99%, bgs., c.l., works 100 lbs. 12.50 · —
bgs., l.c.l., works 100 lbs. 13.00 - 15.50
Monohydrated, 35%, dms., c.l., works 100 lbs. 23.35 · —
dms., l.c.l., works 100 lbs. 24.10 · —
Tribasic, distributors, 50-lb. c.l., works 100 lbs. 28.60 · —
bgs., l.c.l., works 100 lbs. 30.10 · —

Copper undecylenate, dms lb 2.75 —

Copra, Alt., Gulf ports, c.i.f. ton 160.00 · —
Pac. ports, c.i.f. ton 155.00 · —

Coriander oil, USP, bots lb. 6.25 · —

Coriander seed, Moroccan, bgs lb. .18 · —
Rumanian, bgs. lb. .14 · —
Yugoslavian, bgs lb. .08½- —

Corn oil, crude, tanks, works, lb. .16 · —
Foots, (soapstock acid 95%) tanks, New York lb. .06¼- —
Refd., salad, dms. lb. .2173- .22
tanks lb. .1973- —

Corn oil acids, dist., dms lb. .15½- .18
tanks lb. .13 · —

Corn sugar, tanners, chipped, paper bgs, c.l., 60,000 lbs. min. 100 lbs. 7.30 · —
paper bgs., l.c.l 100 lbs 7.45 · —

Corn syrup, 43° Be., tanks, dlvd, N.Y 100 lbs. 6.30 · —
non-ret. dms, c.l., same basis, 100 lbs. 7.23 · —

Corrosive sublimate (see Mercuric chloride).

Cortisone acetate, USP, bots., kilo or more gram .95 1.75

Costus oil, bots oz. 6.00 —

Cottonseed meal, 41%, bgs., Memphis ton 69.00 Nom.

Cottonseed oil, crude, tanks, South, East lb. .13½- Nom.
tanks, Valley lb. .13 · —
tanks, Texaco, Waco lb. .12¾- —
Foots (soapstock, acid 95%), New York, tanks lb. .04½- —
Refd., salad, dms lb. .18¾- .19
tanks lb. .16¾- —

Cottonseed oil acids, dist., dms lb. .15½- .18
tanks lb. .13 · —

Coumarin, NF, cryst., dms. lb. 3.20 - 3.30

Cramp bark, NF, bls. lb. .90 - 1.00

Cream of tartar (see Potassium bitartrate).

Creosote carbonate, NF, bots, cbys., lb. 3.05 3.26

Creosote, coaltar, crude, tanks, works, frt, adjusted gal. .24 · —
Crude, soln 80%, tanks, works, gal. .226 · —
Refd., dms., c.l., works gal. .50 · —
dms., l.c.l., same basis gal. .62 · —
tanks, same basis gal. .38 · —

West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c per gallon for coaltar

Creosote, beechwood, cbys., dms., f.o.b. works, dlvd. in Metropolitan area lb. 1.72 1.77
Hardwood, NF, cbys, dms, same basis lb. 1.42 1.47
Pinewood, dms, incl. c.l., works, lb. .0611- —
dms, incl., l.c.l, works lb. .0684- —
dms, incl., l.c.l, ex whse, New York lb. .0795- —
tanks, works lb. .0511- —

Creosote oil (see Creosote coaltar).

Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret, dms., c.l., frt, alld lb. .16½- —
non-ret, dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .145 · —

USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret, dms., c.l., same lb. .18 · —
non-ret dms, t.c.l., same basis, lb. .19 · —
tanks, same basis lb. .16 · —

m-Cresol, 95-98% dms, c.l., works, lb. .60 · —
dms., t.c.l., works lb. .61 · —

m-p-Cresol, 5-95% 3°C., dms., c.l., frt, equald lb. .18 · —
dms., t.c.l., same basis lb. .19 · —
tanks, same basis lb .16 · —

2,97% 2°C, dms., c.l., frt, equald, lb. .22 · —
dms., t.c.l., same basis lb. .23 · —
tanks same basis lb. .20 · —

o-Cresol, 30.5°C, m.p and over, ret., dms, c.l, frt equald lb. .17 · —
ret dms., t.c.l., same basis lb. .18 · —
tanks, same basis lb. .15 · —

30°-30.49°C m.p. dms, c.l., frt, equald lb. .16½- —
ret. dms., t.c.l., same basis lb. .17½- —
tanks same basis lb. .14½- —

29°-29.9°C, m.p., dms., c.l., frt, equald lb. .16 · —
ret dms, t.c.l., same basis lb. .17 · —
tanks, same basis lb. .14 · —

25°-28°C m.p. dms. c.l., frt, equald lb. .15 · —
ret. dms, t.c.l. same basis lb. .16 · —
tanks same basis lb. .13 · —

p-Cresol, 98%, dms., c.l., f.o.b., frt, alld, lb. .50 · —
dms., l.c.l., same basis lb. .52 · —
tanks, same basis lb. .45 · —

2,3-Cresotic acid, dms, ton lots, works lb. 70 · —
dms., smaller lots, works lb. 72 · —

p-Cresyl methyl ether, cns lb. 1.80 2.05

Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald gal. 1.35 · —
dms., t.c.l., same basis gal. 1.40 · —
tanks, same basis gal 1.15 · —
metapara content 25% or less, dms., c.l., t.l., same basis gal. 1.20 · —
dms., t.c.l., same basis gal. 1.25 · —
tanks, frt, equald gal. 1.00 · —
Imp., metapara content 25% or less, f.o.b works, frt, equald to competitive points, c.l. gal. 1.15 · —
l.c.l., f.o.b., works gal. 1.20 · —
tanks, same basis gal. 1.00 · —

Crotonaldehyde, 91-93%, dms., t.c.l, works lb. .25 · —

Crotonic acid, 200-lb, dms., c.l., dlvd lb. .49 · —
dms., l.c.l., dlvd lb. .51 · —

Cryolite, nat, indust., bgs, c.l., works 100 lbs. 13.00 · —
bgs, t.c.l, works 100 lbs. 14.25 · —

Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 · —
bgs, t.t.l., works lb .22 · —

Cubeb berries, NF, bgs. lb. 1.30 · —
Powd., cs. lb. 1.45 · —

Cubeb oil, cns lb 8.75 - 9.00

Cumene, dms, c.l., works lb. .12 · —
dms., t.c.l., works lb. .14 · —
tanks, works lb. .11 · —

Cumin seed, Iranian, bgs lb. .19 · —
Moroccan, bgs. lb. .36 · —
Turkish, bgs. lb. .8 · —

Cumin seed oil, bots., cns lb. 15.50 - 17.00

Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont, contract, ton 57.00 · —
pulv., 21% N, bgs., works, unit-ton. 2.85 · —

Cyanamide, indust, grade, bgs., c.l., works ton 75.00 · —
bgs., t.c.l., works ton 96.00 · —

Indust grade, 6-16 mesh, dms., c.l., works ton 120.00 · —
dms, t.c.l., works ton 140.00 · —

Cyclohexane, 99%, tech., dms., c.l., dlvd, E of Rockies gal. 1.02 · —
dms, t.c.l, same basis gal. 1.10 · —
dms., c.l. dlvd W of Rockies gal. .77 · —
dms., t.c.l., same basis gal. .85 · —
tanks, works gal. .55 · —

98% tech, 40-dm. lots or more, f.o.b works gal. .56 · —
5-39 dms, same basis gal. .60 · —
tanks, same basis gal. .36 · —

Cyclohexanol, tech., dms., c.l., works, frt, alld, E lb. .30½- —
dms., t.c.l. works, same basis, lb. .31½- —
tanks, works, same basis lb. .28 · —

Cyclohexanone, tech., dms., c.l., works lb. .33½- —
dms., t.c.l. works lb. .34½- —
tanks, works lb. .31 · —

Cyclohexylamine, tech., dms., c.l., works lb. .49 · —
dms., t.c.l., works lb. .50 · —
tanks, works lb. .47 · —

Cypress oil, bots. lb. 5.30 · —

D

2,4-D, tech, bgs, dms., c.l., works, frt, equald lb. .40 · —
bgs, dms, t.c.l., same basis lb. .45 · .49

2,4-D butyl ester, dms, c.l., works, lb. .43 · —
dms., t.c.l., same basis lb. .48 · .52
tanks, same basis lb. .42 · —

2,4-D isopropyl ester, dms., c.l., works lb. .43 · —
dms., t.c.l., works lb. .48 · .52
tanks, works lb. .42 · —

Dammar gum, Batavia, A E, cs lb. No stocks.
East India, Batu, bold, bgs lb. .15½- .18
nubs and chips, bgs lb. .10 · .11
black, bold, bgs lb. .16 · .18
nubs and chips, bgs lb. .13 · .14¼
unscraped, bgs. lb. .13 · .14½
pale, chips, bgs lb. .16 · .18
pale, nubs, bgs. lb. .20¾- .24
Siam, cs. lb. .31½- .34
Singapore, No. 1, bgs. lb. .38 · .44
No 2, bgs. lb. .29 .32
dust, bgs. lb. .18 .20
No 3, bgs. lb. No stocks.

Dandelion root, bls lb. .35 .40

DDD, tech., flake, grd., fib, dms., c.l., works lb. .45 · .47
fib, dms., t.c.l., works lb. .46 · .48

DDT, flake or lump, bgs., c.l., dlvd lb. .21 · —
bgs, smaller lots, same basis, lb. .23 · —
fib, dms., c.l., same basis lb. .22 · —
fib dms., smaller lots, same basis lb. .24 · —

Powdered DDT 1c. per pound higher.

DDVP (see Dimethyl dichlorovinyl phosphate).

1-Decanol, tech., dms., c.l., divd. E. lb. .41½- —
dms., l.c.l., divd. E. lb. .43½- .44½
tanks, divd. E. lb. .37½- —
Decyl alcohol, mixed isomers, dms., c.l., divd. lb. .20½- —
dms., l.c.l., divd. lb. .22 - —
tanks, divd. lb. .18 - —
Perfume grade, bots. lb. 1.00 - 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls. lb. .50 - .60
Defluorinated phosphate, feed grade 14% P, paper bgs., c.l., t.l., Tupelo, Miss ton.52.00 - —
18% P, paper bgs., c.l., Plant City, Fla ton.61.25 - —
paper bags, c.l., works, Wales, Tenn. ton.66.00 - —
19% P, paper bgs., c.l., t.l., works, Houston, Tex. ton.69.35 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common (15-17% free fatty acid), 400-lb. dms. lb. .12 - .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. 13 - —
Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., divd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. 74½- .80½
tanks, divd., same basis gal. 53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., divd. E. of Rockies gal. .72 —
dms., l.c.l., same basis gal. .77 .83
tanks, same basis gal. .56
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., divd. E. of Rockies gal. .70½ —
dms., l.c.l., same basis gal. 75½- .81½
tanks, same basis gal. .54½- —
SD2B, dms., c.l., divd. E. of Rockies gal. .69 —
dms., l.c.l., same basis gal. .74 - .80
tanks, same basis gal. .53 - —
SD3A, dms., c.l., divd. E. of Rockies gal. .68 —
dms., l.c.l., same basis gal. .73 .79
tanks, same basis gal. .52 - —
SD23A, dms., c.l., divd. E. of Rockies gal. .70½ —
dms., l.c.l., same basis gal. 75½- .81½
tanks, same basis gal. .54½- —
SD23H, dms., c.l., divd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 —
SD29, dms., c.l., divd. E. of Rockies gal. .69½- —
dms., l.c.l., same basis gal. 74½- .80½
tanks, same basis gal. .53½- —
SD30, dms., c.l., divd. E. of Rockies gal. .68 —
dms., l.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
SD35A, dms., c.l., divd. E. of Rockies gal. .71 - —
dms., l.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 —
SD-40, dms., divd. E. of Rockies, gal. .70½- —
dms., l.c.l., same basis gal. 75½- .81½
tanks, same basis gal. .54½- —
For anhyd. alcohol on above formulas prices are 7c per gal. higher
West coast divd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms. lb. 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms. lb. 6.50 - —
Dextrin, corn gum, paper bgs., c.l., 100 lbs. 9.39 - —
paper bgs., l.c.l. 100 lbs. 9.54 - —
canary dark, paper bgs., c.l. 100 lbs. 9.23 - —
paper bgs., l.c.l. 100 lbs. 9.38 - —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 - —
paper bgs., l.c.l. 100 lbs. 9.28 - —
white paper bgs., c.l. 100 lbs. 8.97 - —
paper bgs., l.c.l. 100 lbs. 9.12 - —
Corn dextrin in cotton bgs. 15c per 100 lbs. higher
Dextrose, anhyd., coml., bgs., c.l. 100 lbs. 8.65 - —
bgs., l.c.l. 100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms. 100 lbs. 14.70 - —
100-lb. dms. 160 lbs. 15.20 - —
Hydrated, coml., bgs., c.l. ex ex whse. 100 lbs. 7.45 - —
bgs., c.l., ex whse 100 lbs. 7.60 - —
USP, dms. lb. .19¾- —
Diacetone alcohol, acetone-free, dms., c.l., divd. lb. .15½- —
dms., l.c.l., divd. lb. .17 - —
tanks, divd. lb. .13 - —
Tech., dms., c.l., divd. lb. .15 - —
dms., l.c.l., divd. lb. .16½- —
tanks, divd. lb. .12½- —
Diacetyl, flavor grade, bots. lb. 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½- —
Diallylamine, dms., c.l., divd. lb. .98½- —
dms., l.c.l., divd. lb. 1.00 - —
tanks, divd. lb. .96 - —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., l.c.l., same basis lb. .94 - —
tanks, same basis lb. .91 - —
Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., divd. lb. .65 - —
t.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., divd. lb. .65 - —
dms., t.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., divd. lb. .57 - —
dms., l.c.l., same basis lb. .60 - —
tanks, same basis lb. .54 - —
Dibutyl fumarate, dms., c.l., t.l., divd. E lb. .31½- —
dms., l.c.l., t.t.l., divd. E lb. .33 - —
tanks, divd. E lb. .29 - —
Dibutyl maleate, dms., c.l., t.l., divd. E lb. .31½- —
dms., l.c.l., t.t.l., divd. E lb. .33 - —
tanks, divd. E lb. .29 - —
Dibutyl phthalate, dms., c.l., divd. E lb. .31½- —
dms., l.c.l., same basis lb. .33 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .29 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works lb. .68½- —
tanks, works lb. .65½- —
Dibutyl tartrate, dms., works, frt. alld. lb. .63½- —
Dibutylamine, dms., c.l., divd. lb. .55½- —
dms., l.c.l., same basis lb. .57 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., divd. lb. .28½- —
dms., l.c.l., divd. lb. .30 - —
tanks, divd. lb. .26 - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb. .73 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾- —
dms., l.c.l., same basis lb. .13¾- —
tanks, same basis lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E lb. .12 - —
dms. 2,000 lbs. or more same basis lb. .14½- —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., divd. E lb. .15½- —
dms., l.c.l., t.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .85 - —
dms., l.c.l., same basis lb. .75 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .49½- —
fib. dms., l.c.l., same basis lb. .51½- —
Dicyclopentadiene, dms., c.l., f.o.b. works lb. .14½- —
dms., l.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 - —
Didecyl phthalate, dms., c.l., works. lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tankcars, tanktrucks, 2,000 gals. lb. .25 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., divd. lb. 1.85 - —
dms., l.c.l. divd. lb. 1.90 - —
Diethanolamine, dms., c.l., divd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld. lb. .28½- —
tanks, frt. alld. lb. .26½- —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., t.o.b. works lb. .47½- —
dms., l.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., divd lb. .69½- —
dms., l.c.l., divd. lb. .71 - —
tanks, divd. lb. .67 —
Diethyl oxalate, dms., c.l., f.o.b. works lb. 42½ —
dms., l.c.l., same basis lb. 43½- —
tanks, same basis lb. 40 —
Diethyl phthalate, dms., c.l., divd. lb. .29¾- —
dms., l.c.l., divd. lb. .31¼- —
tanktrucks, 1,000-1,999 gals, same basis lb. .27¾- —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. .27¼- —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 - —
dms., l.c.l., frt. alld. E lb. .22½- —
tanks, frt. alld. E lb. .18½- —
Diethyl thiourea, dms., c.l., t.l., works lb. .58 - —
dms., l.c.l., same basis lb. .59 - —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works. lb. 2.30 - —
5-44 dm. lots, works lb. 2.35 - —
1-4 dm. lots, works lb. 2.40 - —
N,N-Diethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 —
Diethylamine, dms., c.l., divd. E lb. .52 —
dms., l.c.l., same basis lb. 53½ —
tanks, same basis lb. .49½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —

TENNESSEE CORPORATION

We mine Copper, Sulfur, Iron and Zinc and are basic producers of their chemical derivatives. Our basic position in these elements is your assurance of exacting quality control from raw materials to finished product.

COPPER
SULFUR
IRON
ZINC
MANGANESE
FLUORINE

Copper Sulfate
Copper Sulfate, Monohydrated
Copper Carbonate
Ferric Iron Sulfate
Manganese Sulfate
Manganous Oxide
Sulfuric Acid
Sulfur Dioxide
Para Toluene Sulfonic Acid, Anhydrous
Chlorosulfonic Acid
Zinc Sulfate, Monohydrated
Zinc Oxide
Sodium Silicofluoride
Potassium Silicofluoride

TENNESSEE CORPORATION
612-629 Grant Building, Atlanta 3, Georgia

Diethylbenzene, 380 lb. dms., c.l., t.l., frt. alld., Zone 1 lb. .17½- —
f.o.b., Zone 2 lb. .18½- —
380-lb. dms., l.c.l., c.l., f.o.b. Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —
tankcars, Zone 1 lb. .15 - —
Zone 2 lb .16 —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies

Di-2-ethylhexyl adipate (see Di-octyl adipate).

Di-2-ethylhexyl phthalate (see Di-octyl phthalate).

Diethylene glycol dms. c.l. divd E. lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —

Diethylene glycol diethyl ether, dms., c.l., works lb. .55 - —
dms., l.c.l., works lb. .55¾- —

Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾- —
dms., l.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld. E lb. .28¼- —

Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, works lb. .28¾- —

Diethylene glycol monoethyl ether, dms., c.l., divd. E lb. .22½- —
dms., l.c.l., divd. E lb. .24 - —
tanks divd E lb. .20 - —

Diethylene glycol monoethyl etner acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —

Diethylene glycol monomethyl ether, dms., c.l., divd. E lb. .21 - —
dms., l.c.l., divd. E lb. .22½- —
tanks, divd E lb. .18½- —

Diethylenetriamine, dms., c.l., divd, E lb. .44 - —
dms., l.c.l., divd E lb. .45½- —
tanks, divd E lb. .41½- —

Diethylstilbesterol, USP, bots. 10-kilo lots kilo 100.00 147.50
bots, 1-kilo lot kilo 110.00 152.50

Digitalis leaves USP dom. dms lb 1.25 —
Digitoxin, USP, bots gram 3.75 4.20

Diglycol laurate dms., ton lots lb .32½- —
Diglycol stearate, dms., t.l lb. .26 - —

Digiycolic acid bgs. c.l., t.l., works. lb. .15½- —
bgs. l.c.l. works lb. .16 - —

Dihexyl sebacate dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —

Dihydrazine sulfate, dms., works lb. 1.10 1.25

Dihydrostreptomycin sulfate, bulk. gram .03 - —

1,2-Dihydroxy anthraquinone, dms., works lb 3.45 - —

2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb 2.55 - —
Tech., dms., 20,000 lbs or more lb 1.11 - —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 - —
dms., 150 lbs to 1,050 lbs lb 1.15 - —

Di-isobutyl ketone, dms., c.l., divd. lb. .17 - —
dms., t.c.l. divd. lb. .18½- —
tanks, divd lb. .14½- —

Di-isobutyl phthalate, dms., c.l., divd E. lb. .31½- —
dms., t.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —

Di-isobutylene dms. c.l., divd. E lb. .11½- —
dms., l.c.l., divd. E lb. .08 - —
tanks, divd E.

Di-iso-octyl phthalate, dms., c.l., works lb. .29 - —
dms., t.c.l., same basis lb. .30½- —
tanktrucks, 1,000-1,999 gals. works lb. .27 - —
tankcars, tanktrucks, 2,000 gals., works lb. .26½- —

Di-iso-octyl sebacate, dms., c.l., works lb .62 - —
dms., t.c.l., works lb. .61¼- —
tanks, works lb. .60 - —

Di-isopropanolamine, dms., c.l., divd. lb. .23¼- —
dms., t.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —

Di-isopropylamine dms., c.l., divd. E. of Rockies lb. .50½- —
dms., t.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —

Dillweed oil, dom., bots., dms lb. 4.50 - —

Dimethyl anthranilate, cns. lb. 4.15 - —

Dimethyl dichlorovinyl phosphate, 55-gal. dms., divd lb. 3.50 - —

Dimethyl ethanolamine, anhyd., dms., c.l., divd. E lb. .78 - —
dms., l.c.l., divd. E lb. .79½- —
tanks, divd, E lb. .75½- —

Dimethyl ethanolamine, 70%, dms., c.l., divd., 100% basis, contained amines lb. .78 - —
dms., t.c.l., divd., 100% basis lb. .79½- —
tanks, divd., 100% basis lb. .75½- —

Dimethyl hydroquinone, dms. lb. 1.90 2.20

Dimethyl phthalate, dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .31¼- —
tanktrucks, 1,000-1,999 gals., same basis lb. .27¼- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .27¼- —

Dimethyl sebacate, dms., c.l., works. lb. 1.30 - —
dms., l.c.l., works lb. 1.30½- 1.31
tanks, works lb. 1.28 — —

Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., t.c.l., works lb. .18½- —
tanks, works lb. .16½- —

Dimethyl sulfide, dms., c.l., works. lb. .17½- —
dms., l.c.l., works lb. .18½- .19½
tanks, works lb. .15 - —

Dimethyl sulfoxide, dms., c.l., f.o.b. works lb. .35 - —
dms., l.c.l., same basis lb. .37 - .38
tanks, same basis lb. .33 - —

Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald. 100% basis lb. .38½- —
tanks, frt. equald, 100% basis, lb. .28 - —
40% soln., dms., c.l., frt. equald., 100% basis lb. .35 - —
dms., l.c.l., frt. equald. 100% basis lb. .35¼- —
lb. .28 - —

N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —

N,N-Dimethylformamide, dms., c.l., t.l., works lb. .32¼- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —

2,4-Dinitroaniline, dms., frt. alld lb. .75 - —

Dinitroaniline orange toner, CP, bbls., divd. E. of Rockies. lb. 1.61 - —

Dinitroaniline orange toner prices 1c. higher W of Rockies.

m-Dinitrobenzene, 89°C., dms. lb. .26 - —

2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E. lb. .17¾- —
tanks, frt. alld. E. lb. .17 - —

2,4-Dinitrophenol bbls. lb. .41 - —

2,4-Dinitrotoluene, oil, dms. lb. .11 - —
Refd. 63°C., dms. lb. .23 - —

Dioctyl adipate, dms., c.l., works lb. .38½- —
dms., l.c.l., works lb. .39½- —
tanks, works lb. .36 - —

Dioctyl phthalate, dms., c.l., frt. alld, E lb. .27 - —
dms., l.c.l., frt. alld. E lb. .29½- —
tanktrucks, 1,000-1,999 gals., same basis lb. .25 - —
tankcars, tanktrucks, 2,000 gals., same basis lb. .24½- —

Dioctyl phthalate prices ¾c. higher in West.

Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
dms., t.c.l., works lb. .62¼ —
tanks, works, divd. lb. .59¼- —

1,4-Dioxane, dms., c.l., frt. alld. E. lb. .31½- —
dms., l.c.l., frt. alld. E lb. .33 - —
tanks, frt. alld. E lb. .29 - —
Prices in the west are 2c. per lb. higher.

Dipentaerythritol, bgs. c.l. t.l., divd. E lb. .34 - —
bgs., l.c.l., t.t.l., divd. E lb. .35 - —

Dipentene, dest.-dist., dms., c.l., works gal. .58 - —
dms., t.c.l., works lb. .62 - —
dms., t.c.l. ex whse. gal. 78 - —
tankscars, works gal. .41 - —

Steam dist. dms. c.l., works, South gal. .72 - —
dms., t.c.l., divd. New York gal. .91 - —
tanks, works, South lb. .55 - —

Dip oil (see Tar acid oil).

Diphenolic acid 1,000-lb or more, bgs., works lb. .75 - —

Diphenolic polyether acids, 1,000-lb. or more, bgs., works lb 1.00 - —

Diphenyl, bgs., c.l. t.l., works lb. .16¾- —
bgs., l.c.l., works lb. .18½- —
tanks, works lb. .15¾- —

Diphenyl oxide perfume grade, cns. lb. .55 - .70

Diphenyl phthalate dms., c.l., works. lb. .52 - —
dms., l.c.l., works lb. .54 - —

Diphenylamine, refd., flake, bgs., c.l., works frt. equald lb. .32 —
bgs., l.c.l., same basis lb. .34 —
Refd., fused, tanks same basis lb. .29 - —
Refd., diphenylamine in dms., ½c. per lb higher

Diphenylguanadine bgs., dms., ton lots, frt. alld lb. .51 - —
bgs., smaller lots, frt. alld lb. .52 - —

Diphenylhydantoin-sodium, USP, dms lb 5.00 5.60

Dipropylene glycol, dms., c.l., frt. alld lb. .17 - —
dms., t.c.l. frt. alld. lb. .18½- —
tanks frt alld lb 14¼ —
Dipropylene glycol prices 1c. higher in West.

Dipropylene glycol methyl ether, dms., c.l., divd. E lb. .20 —
dms., t.c.l. same basis lb. .21½- —
tanks, same basis lb. .18½- —

Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.80 - —

Di-o-tolyiguanidine, dms., ton lots, frt. alld lb. .71 - —
dms., smaller lots, frt. alld lb. .72 - —

Di-o-tolylthiourea, tech. solid, dms., c.l., t.l., frt alld lb. .55 - —

Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis, lb. 1.05 - —
tanks, same basis lb. .90 - —

Dodecenyl succinic anhydride, dms., c.l., t.l., divd. E lb. .50 - —
dms, l.c.l., t.t.l., same basis lb. .52 - —

Dodecylbenzene, dms., c.l., t.o.b., works, frt equald lb. .134 - —
dms., t.c.l., same basis lb. .144 - —
tanks, same basis lb. .11 - —

Dodecylphenol c.l., frt. alld lb. .22½- —
dms., t.c.l., same basis lb. .23½- —
tanks, same basis lb. .20 - —

Dodecylphenol prices on shipments to Western States are 2c. per pound higher.

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.
Blue, FD&C, No. 1 lb.15.65 -16.45
No. 2 lb.15.65 -16.45
Green, FD&C, No. 1 lb.15.65 -16.45
No. 2 lb.19.60 -20.40
No. 3 lb.31.30 -32.10
Red, FD&C, No. 2 lb. 3.60 - 4.40
No. 3 lb.19.60 -20.40
No. 4 lb. 6.00 - 6.80
Yellow, FD&C, No. 5 lb. 3.75 - 4.55
No. 6 lb. 3.65 - 4.45

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb and 1-lb. lots, divd.:
Black, D&C, No. 1 lb.12.40 -13.00
Brown, D&C, No. 1 lb.16.35 -16.95
Green, D&C, No. 5 lb.17.00 -17.60
No. 6 lb.17.40 -18.00
No. 7 lb.14.35 -14.95
Orange, D&C, No. 3 lb 10.50 -10.95
No. 4 lb.19.60 -20.05
No 5 lb 3.80 4.25
Red, D&C, No. 17 lb.12.55 -13.15
No. 18 lb.23.55 -24.15
No. 19 lb.15.00 -15.45
No. 21 lb 3.90 4.35
No. 22 lb.10.50 -10.95
No. 28 lb.27.90 -28.50
No. 33 lb.17.00 -17.45
Violet, D&C, No. 2 lb.15.65 -16.10
Yellow D&C, No. 7 lb.10.50 -10.95
No 8 lb.10.50 -10.95
No. 10 lb.15.10 -15.70
No. 11 lb.14.80 -15.40

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, divd.:
Blue, Ext., D&C, No. 1 lb.15.65 -16.10
Green, Ext. D&C No 1 lb.15.65 -16.10
Red, Ext., D&C, No. 1 lb.13.05 -13.50
Yellow, Ext. D&C No 1 lb.10.50 10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract divd No.
11110 Brilliant scarlet BN lb. 1.79 - —
13390 Fast blue SR lb. 1.57 - —
14025 Yellow 2G lb. 1.26 - —
14030 Orange R, extra, conc. lb. 1.64 - —
14645 Chrome black T lb. .77 - —
14720 Rubine XX, conc lb. 1.76 - —
15510 Orange Y, extra conc. lb. .83 - —

Dyes, coaltar for general use in cloth dyeing numbers are those of the Color Index scale or prototype), contract divd No.
15575 Orange RR lb. .99 - —
15620 Fast Red A, conc. lb. 1.77 - —
15705 Chrome blue black R, conc. lb. 1.12 - —
16150 Scarlet 2RL lb. 1.22 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.26 - —
16230 Fast light, orange 2G lb. 1.39 - —
17590 Brown PG lb. 3.00 - —
18050 Phloxine 2G lb. 1.16 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast yellow 2G lb. 2.32 - —
19140 Yellow XX lb. 2.48 - —
19555 Yellow NN conc. lb. 3.67 - —
20170 Brown Y lb 1.33 - —
20470 Blue black, extra, conc. lb. 1.44 - —
21010 Brown, RX, conc lb. 1.42 - —
22240 Scarlet B lb. 2.81 - —
22310 Red FC lb. 1.57 - —
22311 Brown MCW lb. 1.59 - —
22610 Blue 2B, extra conc lb. 1.51 - —
23500 Red 4BX, conc. lb. 1.80 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow, conc lb. 3.27 - —
26360 Navy blue 3R, conc. lb. 1.84 - —
26695 Black F, conc. lb. 2.30 - —
26900 Milling Red 3R, conc lb. 2.24 - —
27075 Neutral black 2B, conc. lb. 2.75 - —
27720 Gray L lb. 2.18 - —
29165 Fast scarlet 4BNC lb. 2.23 - —
30015 Diazo black VJ conc. lb. 2.48 - —
30045 Yellow brown K, extra lb. 1.45 - —
30235 Black EB, 200% lb. 1.33 - —
30295 Green BY conc. lb. 1.07 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb. 1.85 - —
40000 Yellow 2G lb. 1.44 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B, conc. lb. 4.78 - —
42640 Violet 4BXN lb 2.43 - —
42830 Brilliant blue, BBG lb. 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.54 - —
58005 Alizarin red SC lb. 3.64 - —
59700 Golden orange GFD, single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder lb. 4.90 - —
59800 Dark blue BO, single paste. lb. 2.28 - —
59825 Jade green NC supra, double paste lb. 1.75 - —
61570 Alizarin green CG extra lb. 3.81 - —
63010 Alizarin blue SAPG lb 3.90 - —
63315 Alizarin blue black B lb 3.26 - —
69825 Blue BLFD double paste lb 2.76 - —
70306 Brown BR single paste lb 2.03 - —

Dyes, coaltar, oil-soluble, 100-lb drums, divd. No.
12140 Oil scarlet BL lb. 1.87 - —
12055 Oil orange 7078 V lb. 1.38 - —
26120 Oil red N 1700 lb. 1.94 - —
42535B Methyl violet base lb. 1.81 - —
44045B Victoria blue base lb. 4.06 - —
50415B Oil black 8603 lb. .80 - —
61565 Alizarin cyanine green base. lb. 6.13 - —

Dyes, coaltar, spirit soluble, 100 lb. dms., divd., Black RB lb. 3.69 - —
Spirit brown GN lb. 5.30 - —
Spirit orange R conc. lb. 5.87 - —
Spirit red B conc. lb. 6.41 - —
Pr 517 Spirit yellow 2R conc lb 4.62 - —
Pr 554 Spirit blue THN lb 5.06 - —

E

Echinacea root, bls. lb 1.25 - —
Elm bark, grinding, bls. lb. .30 - .32
Powd., bbls., bxs lb. .60 - —
Select, bundles lb .75 - —
Emetine hydrochloride, USP, bots oz.48.40 - —
Endrin, tech., dms., 100-lbs. or more, 100% basis, divd lb. 2.77 - —
Eosin red toner, bbls., works lb. 1.95 - —
Ephedrine, syn., USP, anhyd., bots. 100-oz.lots oz. .98 - 1.00
hydrous, bots., 100-oz. lots, oz. .92 - —
Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works oz. .75 - —
Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works oz. .73 - —
USP, powd., dms., 100-oz., same basis oz. .73 - —
Epichlorohydrin, dms., c.l., divd lb. .29½- —
dms., l.c.l., divd. lb. .31 - —
tanks, divd. lb. .27 - —
Epinephrine base, syn., USP, bots., 100 gram, lots gram. .58 - —
Epsom salt (see Magnesium sulfate).
Erigeron oil, cns. lb.11.00 - —
Ergot, NF, dms., tin-lined lb. 2.00 - 2.50
Eserine salicylate, bots. oz.34.50 -40.00
Eserine sulfate, bots. oz.26.00 - —
Ester gum, gum-rosin type, dms., c.l., divd., Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .18½- —
Wood-rosin type, dms. c.l., same basis lb. .18½- —
Ether (see specific product)
Ethyl acetate, nat., ferment, 85-88%, dms. c.l. divd lb. .15 - —
dms., t.c.l., divd lb. .16½- —
tanks divd lb. .12½- —
95-98% dms. c.l., divd. lb. .15¼- —
dms., t.c.l., divd lb. .16¾- —
tanks divd lb. .12¾- —
99%, dms., c.l., divd lb. .15½- —
dms., t.c.l., divd lb. .17 - —
tanks, divd lb. .13 - —
Syn., 85-88%, dms., c.l., divd lb. .15 - —
dms., t.c.l., divd. lb. .16½- —
tanks, divd lb. .12½- —
95-98%, dms., c.l., divd lb. .15¼- —
dms., t.c.l., divd lb. .16¾- —
tanks divd lb. .12¾- —
99%, dms., c.l., divd lb. .15½- —
dms., t.c.l., divd. lb. .17 - —
tanks divd. lb. .13 - —
Ethyl acetoacetate, dms., c.l., divd. lb. 58½- —
dms., t.c.l. divd. lb. .60 - —
tanks, divd lb. .56 - —
Ethyl acrylate, dms., c.l., t.l., divd. lb. .34¾- —
dms., t.t.l., divd lb. .35¾- —
tanks, divd. lb. .32¼- —
Ethyl alcohol, 190 pf., USP, tax paid dms, c.l., divd. E of Rockies gal 20.63 —
dms. t.c.l. same basis gal. 20 73 -20.84
USP, tax-free, dms., c.l., divd. E. of Rockies gal. .68 - —
dms., t.c.l., same basis gal. .78 - .89
tanks, same basis gal. .52 —
Ethyl alcohol, absolute 200 pf., tax paid, dms. divd E. of Rockies gal.21 75 —
dms., t.c.l., same basis gal.21.85 -21.96
tanks, same basis gal 21 59 —
Ethyl alcohol denatured (see Denatured alcohol, ethyl).

Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., divd. lb. .20 —
dms., t.c.l. same basis lb. .21¼- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bcts. lb. .75 - 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt, alld, E lb. .43 - —
dms., t.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E lb. .40 - —
2-Ethyl butyl alcohol, dms., c.l., works lb. .30 —
dms., t.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethyl butyl ketone, dms., c.l., t.l., works lb. .36 - —
dms t.c.l., t.l. works lb. .36¾- —
tanks works lb. .34 - —
Ethyl butyrate dms., works lb. .85 - 1.00
Ethyl carbamate (see Urethane)
Ethyl cellulose, vis. 4 cps., ngs., 5,000 lb lots or more, frt. alld. E lb. .73 - —
bgs. smaller lots frt alld E lb. .75 - —
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 - —
Ethyl chloride tech., cyls., works. lb. .20 .22
dms. works lb. 18 20
tanks works lb. 10 —
Ethyl cinnamate, cns. lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l., divd. E lb. .43½- —
dms., t.c.l., divd. E lb. .44½- —
tanks divd E lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .2/ - —
Anesthesia, USP dealers, 1-lb. cns lb. 1.01 - —
½ lb cns lb. 1.09 - —
¼ lb cns. lb. 1.21 - —
Indust. dms. c.l. divd. lb. .13½- —
dms., t.c.l., divd. E. lb. .15 - —
tanks, divd E lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., divd. E lb. .37 - —
dms., t.c.l., t.t.l., divd. E lb. .38½- —
tanks, divd E. lb. .34½ —
2-Ethyl hexoic acid 1c. higher W. of Rockies.
2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E lb. .39½- —
dms., t.t.l., same basis lb. .40½- —
tanks, same basis lb. .37 - —
2-Ethylhexyl alcohol, dms., c.l., divd. E lb. .20½- —
dms., t.c.l., divd. E lb. .22 - —
tanks, divd. E lb. .18 - —
Ethyl iodide chys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., t.t.l. frt equald lb. .52½- —
tanks frt equald lb .50 —
Ethyl morphine hydrochloride, USP, bots oz.11.85 —
Ethyl oenanthate, dms lb 1.05 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., divd. E lb. .49 - —
dms., t.c.l., divd. E lb. .50½- —
tanks, divd. E lb. .47 - —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.04 - —
N-Ethyl-m-toluidine, tech., uq., tanks frt. alld lb. .83 - —
N-Ethyl-o-toluidine, bbls lb. .88 - —
Ethylamine (see Mono-, Di- or Tri-)
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., t.c.l., frt. alld lb. .58 - —
tanks, frt. alld lb. .55 - —
Ethylbenzene, 99% dms., c.l., t.t., frt. equald lb, .14 - —
dms., t.c.l., same basis lb. .16 - —
tanks, same basis lb. .11½- —
Ethylene, contract refy gate lb. .0475- .052a
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., t.c.l. frt equald lb. .31½- —
tanks, frt equald lb. .28½- —
Ethylene dichloride dms., c.l., divd. lb .11½- —
dms., t.c.l., same basis lb. .13 —
tanks, same basis lb .09 —
Ethylene dichloride prices W. of Rockies, 1c per lb higher
Ethylene glycol, indust., dms., c.l., divd. E lb. .16 - —
dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms, c.l., divd. E lb. .22 - —
dms. t.c.l., divd. E lb. .23½- —
tanks, divd E lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., divd. E lb. .21 - —
dms., t.c.l., divd. E lb. .22½- —
tanks, divd E lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., divd. E lb. .19½- —
dms., t.c.l., divd. E lb. .21 - —
tanks, divd. E lb. .17 - —
Ethylene glycol monomethyl etner, dms., c.l., divd. E lb. .21 - —
dms., t.c.l. divd. E lb. .22½- —
tanks, divd E lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., works lb. .29 - —
dms., t.c.l., works lb. .29¾- —
tanks, works lb. .27 - —
Ethylene glycol monostearate, flake, 150-lb. ctn lb. .33 - —
Ethylene oxide, dms., c.l., divd E. lb. .21½- —
dms., t.c.l., divd. E lb. .24½- —
tanks, divd E lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., divd. E., 100% basis lb. .40 - —
dms t.c.l. divd E., 100% basis, lb. .41½- —
tanks, divd. E., 100% basis lb. .38 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP cns., dms lb. .85 - 1.40
Eucalyptus oil, NF rectified, 70-75% dms. lb. .45 - —
NF rectified, 80-85% dms. lb. .53 - .63
Eugenol, tech., dms lb. 0.00 - —
USP, dms. lb. 1.90 - —
Euphorbia herb, bls. lb. .12 - .15

F

F salt paste, tech., dms., works lb. 2.50 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed, Argentine, bgs lb. .17 - —
French, light, bgs lb. .16 - —
Indian, light, bgs lb. .17½- —
Rumanian, bgs lb. .14 - —
Yugoslav light bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .09 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., t.c.l., works 100 lbs. 9.00 - —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 - 6.75
bbls. t.c.l., works 100 lbs. 5.75 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 8.25
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08¼- —

Ferric citrate, gran., dms.	lb.	.86	—
Ferric hypophosphite, NF, 175-lb. dm	lb.	6.25	—
Ferric naphthenate, liq., 6% Fe, dms., frt. alld	lb.	.28¼-	—
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E	lb.	1.30	—
Ferric oxides (see iron oxides).			
Ferric phosphate, NF, soluble, gran. pearls, cs	lb.	.72	.75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm.	lb.	.79	—
Ferric resinate, dms., ton lots, frt. alld	lb.	.45	—
Ferric stearate dms., c.l., frt. alld.	lb.	.39	—
dms., l.c.l., frt. alld	lb.	.40	.44
Ferric sulfate partly hydrated, bgs., c.l., works	ton.	35.25	—
bgs., l.c.l., works	ton.	36.25	-42.25
bulk, c.l., works	ton.	33.25	—
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms	lb.	.68	—
NF, green, gran., 100-lb. dms., frt. equald	lb.	.68	—
Ferric-ammonium oxalate, fine gran., dms	lb.	.27½-	.29½
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works	lb.	.32½-	—
Ferric-sodium oxalate, fine gran., dms	lb.	.27½-	.29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald	lb.	.96	—
Ferrous sulfate, gran., bgs., c.l., works	ton.	34.50	—
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs.		3.35	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP, cryst., bbls., dms	lb.	.09½-	.10

Fir balsam, Canada, bbls.	gal.	34.00	-35.00
Oregon, bbls.	gal.	3.40	4.04
Fir oil, Canada, cns	lb.	1.70	1.75
Fish oil, refd., alkali, dms	lb.	.1380-	.1430
Kettle-bodied, dms.	lb.	.1530-	.1580
Light-pressed, dms.	lb.	.1280-	.1330
tanks	lb.	.1080-	—
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units.		.12	—
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts	ton.	118.00	-120.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts.	ton.	114.00	-116.00
Fleaseed (see Psyllium seed).			
Folic acid, USP, nots., fib. dms., kilo lots or more gram.		.25	—
10% feed grade fib dms., 5 kilos or more	kilo.	30.00	-44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l. dlvd	lb.	.0695-	—
tanks, dlvd.	lb.	.0405-	—
Formaldehyde, methanol-free (uninhibited), tanks, dlvd	lb.	.0375-	—
Formic acid, 85%, cbys. c.l., works.	lb.	.1570-	—
cbys., l.c.l., works	lb.	.1620-	.1720
90%, cbys., c.l., works	lb.	.1625-	—
cbys., l.c.l., works	lb.	.1675-	.1775
Fringetree bark, bls	lb.	.65	.70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald	lb.	23¼-	—
dms., l.c.l., frt equald	lb.	.24¾-	—
Fumaric acid in bags ½c. per lb. less.			
Furfural, dms. c.l. works	lb.	.13	—
dms., l.c.l., works	lb.	.14	—
tanks, dlvd. E	lb.	.11½-	—
tanks, dlvd. W	lb.	.12½-	—

Furfuryl alcohol, cns., works	lb.	.32	—
dms., c.l., t.l., Newark, N. J.	lb.	.19½-	—
dms., l.c.l., l.t.l., Newark, N. J.	lb.	.20½-	—
dms., c.l., t.l., Memphis, Tenn.	lb.	.18	—
dms., l.c.l., l.t.l., Memphis, Tenn.	lb.	.19	—
tanks, dlvd. E. of Denver	lb.	.175	—
Fusel oil, refd., dms., c.l., dlvd	lb.	.18	—
dms., l.c.l., dlvd.	lb.	.19½-	—
tanks, dlvd.	lb.	.15½-	—

G

G salt, bbls., frt. alld., 100% basis	lb.	.73	—
Gallic acid, NF. VII, bbls., 1,000-lb. lots	lb.	2.00	—
bbls., smaller lots	lb.	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb.	1.78	—
bbls., smaller lots	lb.	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld	lb.	1.75	—
Gammapicoline (see g-picoline).			
Garlic oil, dom., bots.	oz.	4.75	6.05
Imp., bots.	oz.	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd	lb.	.55	—
150 AOAC test, bbls., c.l., dlvd.	lb.	.64	—
200 AOAC test, bbls., c.l., dlvd.	lb.	.70	—
225 AOAC test, bbls., c.l., dlvd.	lb.	.74	—
275 AOAC test, bbls., c.l., dlvd.	lb.	.82	—
Gelsemium root, bls.	lb.	.30	.35

Gentian root, bls.	lb.	.24	—
Grd., bbls., bxs.	lb.	.30	—
Powd., bbls., bxs.	lb.	.30	—
Geraniol, extra cns., dms.	lb.	1.75	2.40
Soap grade, dms.	lb.	.90	1.75
Standard, cns., dms.	lb.	1.65	—
Synthetic, dms.	lb.	1.30	—
Geranium oil, Algerian, cns.	lb.	21.00	-24.00
Bourbon, cns.	lb.	15.00	-19.00
Turkish (see Palmarosa oil).			
Geranyl acetate cns.	lb.	1.90	2.70
Synthetic, dms.	lb.	1.45	—
Ginger oil, dist., bots.	lb.	12.00	-14.00
Ginger oleoresin, NF from African root, bots	lb.	4.25	5.00
NF, from Jamaican root, bots.	lb.	7.75	—
Ginger root, Cochin, bgs	lb.	.19½-	—
Jamaican, No. 3, bgs.	lb.	.28	—
Nigerian, split, bgs.	lb.	.25	—
Sierra Leone, bgs.	lb.	.35	—
Glauber's salt (see Sodium sulfate).			
Gluconic acid tech. 50% dms., c.l., t.l., f.o.b. works	lb.	.20	—
dms., l.c.l., f.o.b. works	lb.	.21	—
tanks, f.o.b works	lb.	.17	—
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd	lb.	.16	—
131 jellygrams, bgs., c.l., same basis	lb.	.16½-	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½-	—
191 jellygrams, bgs., c.l., same basis	lb.	.19½-	—
222 jellygrams, bgs., c.l., same basis	lb.	.21	—

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Acids and Anhydrides

acetic acid
Organic synthesis
Reaction medium and solvent
Dyeing assistant

acetic anhydride
Acetylating agent
Dehydrating agent in nitration and sulfonation reactions, etc.

propionic acid
Ca or Na salt used as bread mold inhibitor

propionic anhydride
Acylating agent
Intermediate

n-butyric acid
For the preparation of butyric esters useful in formulating perfumes and flavorings

n-butyric anhydride
Acylating agent
Intermediate

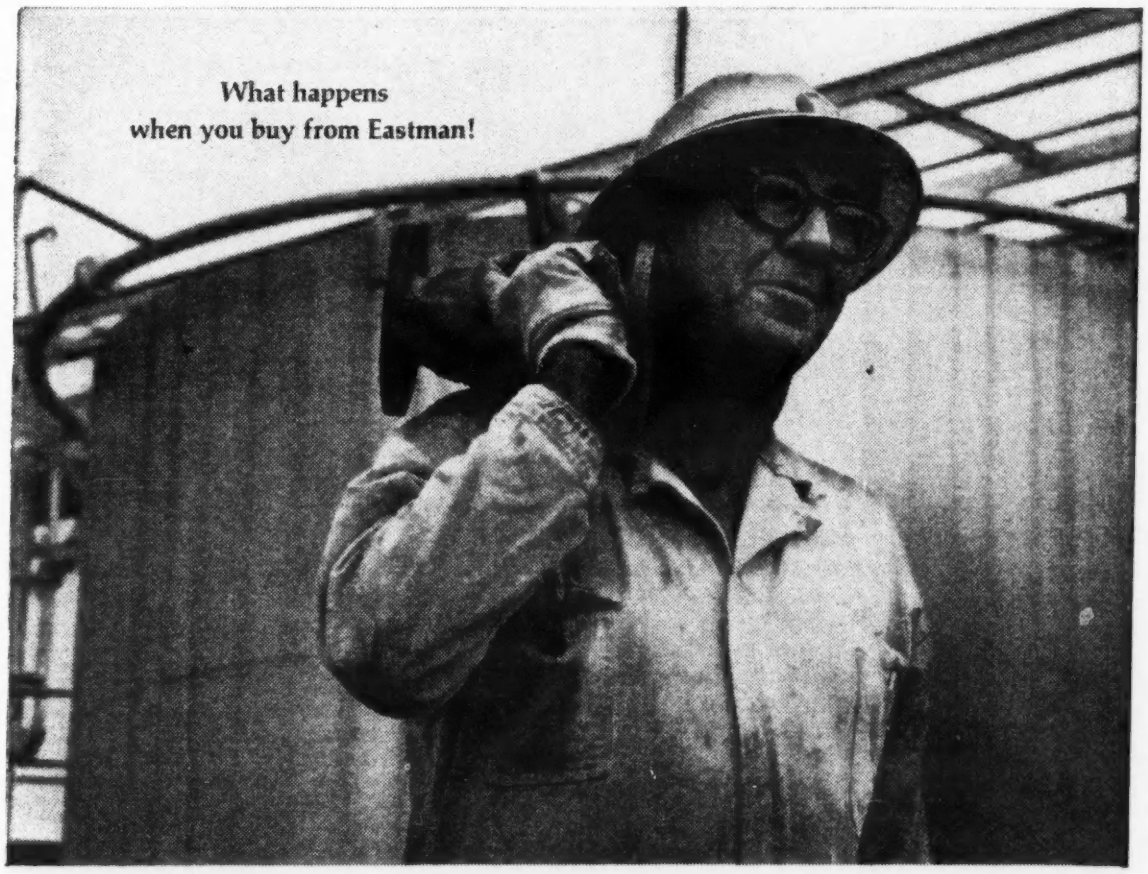
isobutyric acid
As a starting point for the synthesis of plasticizers, perfume materials and lacquer solvents

isobutyric anhydride
For the preparation of aromatic esters for perfumes

2-ethyl hexoic acid
Pb, Mn and Co salts are used as oil paint driers; Zn and Na salts as emulsifying and dispersing agents

crotonic acid
A versatile and reactive intermediate

For properties and shipping information on these and other Eastman products, see **Chemical Materials Catalog**, page 363 or **Chemical Week Buyers' Guide**, page 107



The case of the culprit catalyst

"The phone was ringing when I walked into the office on that Monday morning," mused one of our regional sales managers.

"The customer's greeting was rather cheerful considering the circumstances he then proceeded to relate.

"In his own words it went something like this: 'We have a new process technique out here, but we're not overly proud of it. We're making aluminum acetate...using as reactants *your glacial acetic acid* and one of our new aluminum storage tanks.'

"I was glad he still had a sense of humor but wished that I had taken the day's vacation, which was briefly considered late Sunday.

"Well, he went on to relate that their yields on a process (not the new one he had just mentioned) in which our acetic acid was one of the reactants had dropped off alarmingly. While checking out process controls and materials they found aluminum acetate in the acetic acid storage tank.

"Under the circumstances his conclusion that our acid contained a catalyst for the unwanted reaction seemed even to me a reasonable hypothesis.

"Arrangements were made to send a large sample to our Acid Division Control Laboratories for complete analysis, and I held my breath several days until the final report came in.

"A metal catalyst was present, but one that for a number of good reasons we avoid like the plague. Armed with the information that it was extremely unlikely that contamination occurred prior to unloading, we dispatched a technical service man to the customer's plant to help find out where it was coming from.

"And with the aid of an improperly functioning check valve, he did. Seems that the acetic acid storage tank was connected directly to a reactor in which the metal catalyst was (as it should have been) present in salt form. Trace amounts were reaching the storage tank...and you know the rest.

"Fortunately, tank damage was not extensive, and by filtering, they were able to make use of the acid containing the aluminum acetate. After cleaning out the tank it was filled back up... with a new supply of our pure glacial acetic acid.

"Oh yes, a brand new check valve was installed, too."

The normal way we keep our customers happy? If necessary, yes. But more an example of the interested personal service you get when you buy from Eastman.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis
West Coast: Wilson & Geo. Meyer & Company, San Francisco, Los Angeles, Portland, Salt Lake City, Seattle

Glue, green, 40 jellygrams, bgs., c.l., same basis lb. .16 • —
86 jellygrams, bgs., c.l., same basis lb. .16 • —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
Green, bone, 135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., divd lb. .18 • —
95-149, bgs., c.l., divd lb. .19 • —
122-149, bgs., c.l., same basis lb. .20½- —
150-177, bgs., c.l., same basis lb. .22½- —
178-206, bgs., c.l., same basis lb. .25 • —
207-236, bgs., c.l. same basis lb. .28 • —
237-266, bgs., c.l., same basis lb. .30½- —
267-293, bgs., c.l., same basis lb. .32½- —
299-330, bgs., c.l., same basis lb. .34½- —
331-362, bgs., c.l., same basis lb. .36½- —
363-394, bgs., c.l., same basis lb. .38 • —
395-427, bgs., c.l., same basis lb. .40 • —
428-460, bgs., c.l., same basis lb. .42 • —
461-494, bgs., c.l., same basis lb. .44 • —
495-529, bgs., c.l., same basis lb. .46 • —
Hide glue, l.c.l. prices 2c higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld lb. 1.80 • —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 • —

l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 -300.00
Bots., 50-kilo lots kilo. 100.00 • —
Bots., 500-kilo lots kilo. 75.00 • —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd, lb. .13½- .14
nat., crude, soapiye, 80%, tanks, dlvd lb. .12½- .12¾
nat., refd., USP, CP, 99%, dms., c.l., dlvd lb. .26⅝- —
dms., l.c.l., dlvd lb. .27⅜- —
tanks, dlvd. lb. .24⅞- —
Dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .25¾- —
dms., l.c.l., dlvd. lb. .26½- —
tanks, dlvd. lb. .24 • —
nat., high gravity, dms., c.l., dlvd lb. .26½- —
Glycerine, nat., high gravity, dms., l.c.l., dlvd lb. .27¼- —
tanks, dlvd. lb. .24¾- —
Dom., refd., syn., 99.5%, dms., c.l., dlvd lb. .26¾- —
dms., l.c.l., dlvd lb. .27½- —
tanks, dlvd. lb. .25 • —
Imp., nat., crude, soapiye, 80%, c.i.f. lb. .12½- —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine)
Glycolic acid (see Hydroxyacetic acid).
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 • .31
Glycolonitrile, 70%, aqueous, dms., c.l., t.l., works lb. .40 • —
dms., l.c.l., same basis lb. .42 • —
tanks, same basis lb. .39 • —

Glyoxal, 30%, dms., c.l., works lb. .20½- —
dms., l.c.l., works lb. .21¼- —
tanks, works lb. .18 • —
Golden seal root, NF, tested, bls. lb. 2.90 - 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.25 • —
Grapefruit oil, dms. lb. 2.60 - 2.75
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 • .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 • .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 • .24½
Graphite, cryst., 95-97%, powd., bgs., fib. dms., ex whse lb. .29 • .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 • .31
Grease, white, choice all hog, tanks, dlvd lb. .07 • .07⅛
Yellow, tanks, dlvd. lb. .05½- —
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .12 • —
dms., l.c.l., same basis lb. .14 • —
tankcars, same basis lb. .10½- —
Extra winter, strained, dms., c.l., Chicago lb. .15 • —
dms., l.c.l., same basis lb. .17 • —
tankcars, same basis lb. .13½- —
Prime, burning, dms., c.l., same basis, Chicago lb. .17 • —
dms., l.c.l., same basis lb. .19 • —
tankcars, same basis lb. .15½- —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

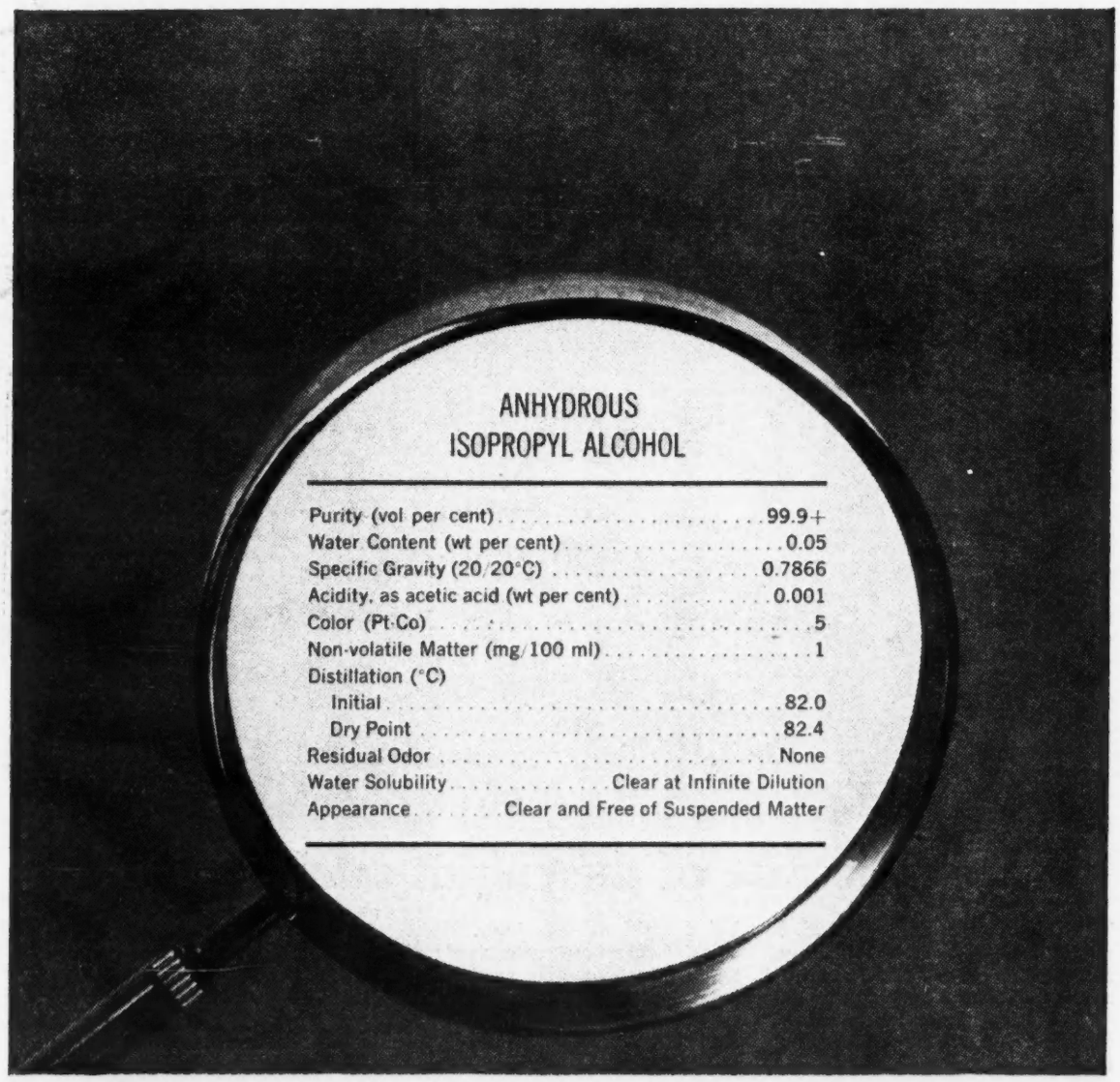
GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. lb. .40 • —
Guaiacol, NF, cryst., dms., tins lb 2.10 - 2.15
liq., cbys., dms. lb. 2.30 - 2.40
Guaiacwood oil, cns. lb. .65 - .80
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt. lb. .38 • —
bgs., l.c.l. same basis lb. .40 • .42
Indust., bgs., c.l., same basis lb. .32 • —
Tech., bgs., c.l., same basis lb. .30 • —

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis lb. 1.00 • —
bbls., l.c.l. same basis lb. 1.05 • —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies lb 2.45 • —
Hansa G yellow, pigment, bbls lb 2.20 • —
Hawthorn berries, bgs. lb. .18 • .20
Heliotropin 100-lb lots, dms. lb 2.60 3.40
Hellebore root dom, green, bls lb. .70 .75
Helonias root bls. lb. 1.50 • —
Hemlock oil, cns. lb. 2.55 3.00
Henbane leaves, bls lb. .40 • .45
Heptachlor dms, c.l., t.l., frt. alld., 100% basis lb. .96 • —
Heptane, indust., tankcars, New Jersey and New York gal. .20 • —
Houston Texas gal. .1625- —
Hesperidin, purif., 50 kilos, f.o.b. works kilo. 19 70 • —
Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo. 49 25 • —
Hexachlorophene, dms., 1,100 lbs. or more lb 1.84 • —
dms. to 1,100 lbs lb 1.94 • —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech. bgs., 20,000-lb lots or more, Perth Amboy or New York City lb .233 • —
bgs., 1,000-19,999-lb. lots, same basis lb. .243 • —
bgs., smaller lots, same basis lb. .253 • —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 • —
fib dms. smaller lots, same basis lb. .253 • —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., divd New York City and Philadelphia lb. .42½- —
bgs., smaller lots, same basis lb. .43½- .48½
Hexane, industrial, tankcars, New Jersey and New York gal. .20 • —
Houston Texas gal. .16 • —
l-Hexanol, dms., c.l., works lb. .35 • —
dms., l.c.l., works lb. .35¾- —
tanks, works lb .33 —
Hexyl cinnamic aldehyde, dms lb. 3.95 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .45½- —
dms., l.c.l., works lb. .76 —
Hexyl salicylate, dms. lb. 1.70 1.75
Hexylene glycol, dms., c.l., divd lb. .17½- —
dms., l.c.l., dlvd. lb. .19 • —
tanks, dlvd lb. .15 • —
Hexylresorcinol, USP, dms., 25-lb. lots or more dlvd lb 14.00 • —
dms. smaller lots, dlvd lb 14.50 • —
Homatropine hydrobromide, USP, bots oz. 3.25 • —
methylbromide, USP, bots oz. 3.00 • —
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton. 6.75 • —
Horehound herb, bls. lb. .18 • .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works lb. 1.28 • —
240-lb. dms., l.c.l., works. lb. 1.35 • 1.55
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb 2.92 • —
Hydroabietyl alcohol, tech., solid, dms., c.l., divd. zone 1 lb. .29¼- —
dms., l.c.l., divd. zone 1 lb. .29¾- .30¼
tanks, divd. zone 1 lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utch, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys. frt equald lb. .48 • .56
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs 2.50 • —
cbys., l.c.l., divd. Metropolitan area 100 lbs 2.90 • 3.05
tanks, works, frt. equald ton 28.00 • —
20°, cbys., c.l., works 100 lbs 2.75 • —
cbys., l.c.l. divd. Metropolitan area 100 lbs. 3.15 • —
Hydrochloric acid, 20°, tanks, works, frt. equald. ton 30.00 • —
22°, cbys., c.l., works 100 lbs. 3.25 • —
cbys. l.c.l., divd Metropolitan area 100 lbs 3.65 • —
tanks, works, frt equald ton 35.00 • —
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works lb. .15¾- —
cbys. l.c.l., same basis lb. .17¼- .17¾
5-pint bots., extra cs., c.l., same basis lb. .20¾- —
lb. .20¾- —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. .95 • —
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.00 • 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint. .70 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms. c.l., t.l., divd 100 lbs. 17.25 • —
55-gal. dms., l.c.l., t.l.t., divd 100 lbs. 18.75 • —
20-gal. dms., c.l., t.l., divd 100 lbs. 19.00 • —
20-gal., dms., l.c.l., t.l.t., divd. 100 lbs. 20.50 • —
tanks, works frt. equald 100 lbs. 11.50 • —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.75 per cwt. for drum delivery
Hydrofluosilicic acid, dms., works, 30% basis lb. .07 • —
Hydrofuramide, dms., fib cns., works lb. .30 • .40
50-lb. cyls., l.c.l., works lb. .55 • .60
Hydrogen chloride, anhyd., 50-lb. cyls. l.c.l., works lb. .45 • —
Hydrogen cyanide, liq., 98% tanks, works lb. .13 • —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .29 • .31
cyls., dlvd. W. lb. .37 • —
tanks, works lb. .16 • —


ANHYDROUS
ISOPROPYL ALCOHOL
Purity (vol per cent) 99.9+
Water Content (wt per cent) 0.05
Specific Gravity (20/20°C) 0.7866
Acidity, as acetic acid (wt per cent) 0.001
Color (Pt-Co) 5
Non-volatile Matter (mg/100 ml) 1
Distillation (°C)
Initial 82.0
Dry Point 82.4
Residual Odor None
Water Solubility Clear at Infinite Dilution
Appearance Clear and Free of Suspended Matter

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Here is the literature available on MATHIESON INDUSTRIAL CHEMICALS

Safe and Efficient Handling of Anhydrous Ammonia (wall chart)
Anhydrous Ammonia Handling and Storage (22)
Aqua Ammonia Preparation (20)

Mathieson Caustic Soda (AD-1142-261)
Safe and Efficient Handling of Caustic Soda (AD–228–457) (wall chart)

Mathieson Chlorine (AD–1097–459)
Chlorine, Unloading and Safe Handling (AD–1122–959) (wall chart)

Mathieson Anhydrous Hydrazine (AD–1061–558)
Mathieson Hydrazine Solution (MC–348–1260)

Mathieson Unsymmetrical Dimethyl Hydrazine (AD–1057–1157)
Mathieson b-Hydroxyethylhydrazine (MC-351-361)
Mathieson Hydrazine Salts (MC–352–1260)
Mathieson Thiosemicarbazide (MC–359–261)
Mathieson Hydrazodicarbonamide (MC–384–361)
Mathieson Hydrazine Dihydrochloride (MC–381–361)
Mathieson Monohydrazinium Phosphate (MC–385–361)
Mathieson Monomethyl Hydrazine (AD-1167-161)

Home Pool Care (AD–1080–660)
Keeping the Pool Safe and Sanitary (AD-1156-1260)

Mathieson Methanol (MC–393–661)

Safe and Efficient Handling of Nitric Acid (AD–1050–757) (wall chart)

Eliminate Acidity-Control Alkalinity-PH-Plus (AD-631-461)

Refining and Desulphurizing Cupola Iron with Purite (AD–321–960)

Scav-Ox (AD–1010–556)
Scav-Ox in High and Medium Pressure Boilers (MC–356–359)

Soda Ash, Handling and Storage
Unitized Loading of Soda Ash (MC–331)

Textone® for the Textile Industry, and Continuous Bleaching (AD–1005–R1058)
Textone Continuous Bleaching Process (MC–404–261)

Upgrading Inedible Fats with Chlorine Dioxide (AD–1032–1056)
C2® for Slime Control in Paper Mills (MC–400–459)
Laboratory Preparation of Chlorine Dioxide Solutions (MC–339–661)
Penn-Olin Sodium Chlorate, Shipment, Handling, Storage (AD–1157–960)

Mathieson Sodium Methylate (MC–398–1158)
Methods of Analysis (MC–347–356)
Storage and Handling (MC–368–956)

Mathieson Sodium Nitrate (MC–333–758)
Sodium Nitrate, Treating Industrial and Domestic Wastes (MC–397–659)

Mathieson Sulfur (MC–323–359)

Mathieson Sulfuric Acid (AD–1094–1158)
Safe and Efficient Handling of Sulfuric Acid (AD–1033–457) (wall chart)

Mathieson Urea (AD–1169–161)
Mathieson Urea Data Sheet (MC–403–1160)

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Printed in U.S.A. 270

Hydrogen peroxide, 35%, dms., c.l., dlvd. lb. .022 - —
dms., l.c.l., dlvd. lb. .111 - —
tanks, dlvd. lb. .1000- —
Hydroquinone, photo grade, dms., 50-lbs., f.o.b. works lb. 1.10 - —
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l. dlvd. lb. .84½- —
Hydroquinone monomethyl ether, dms., t.l., dlvd lb. 2.59 - —
dms., l.t.l., dlvd. lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle W Va. lb. .073 - —
Hydroxycitronellal, cns. lb. 5.65 - 6.00
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point lb. .74 - —
fib. dms., 2,000 to 19,999-lb lots, same basis lb. .79 - —
fib. dms., 100 to 1,999-lb lots, basis lb. .83 - —
fib. dms., smaller lots, same lb. .93 - —
(Highest viscosity [15,000 cps.] grade is 10c. per lb. higher.)
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots. oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-chys. f.o.b. works lb. 1.95 - —
NF, 50%, 10-chys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 - 1.05
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole, CP, bots. lb. 13.65 -15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more, dlvd. lb 4.50 - —
50-lb. dms., less than 1,000 lb., dlvd lb. 4.75 - —
10 lb cns., 10-50 lbs. dlvd lb. 5.00 - —
5 lb bots., dlvd lb 5.25 - —
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.22
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF dms. 300-lbs., f.o.b. works lb 4.90 - —
dms., 100-lbs., same basis lb 5.05 - —
a-Ionone, cns lb. 4.60 - 5.75
b-Ionone, cns lb. 4.15 - 6.15
Ipecac root, whole, bgs. lb. 8.00 - 8.50
Powd., bbls., bxs lb. 9.50 -10.00
Irish moss, bleached, prime, bls. lb. .35 - —
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .60 - —
bbls., l.c.l. ton lots, same basis. lb. .61 - —
bbls., smaller lots, same basis. lb. .62 - —
Dom., reg. bbls., c.l., dlvd. E lb. .55 - —
alkali-resistant, dom., reg., bbls., c.l., ton lots, same basis lb. .56 - —
bbls. l.c.l. smaller lots, same basis lb. .57 - —
Imp., British, reg., bbls. c.l. dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs. l.c.l lb. .023 .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l., works lb. .12¼- —
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol cns lb. 1.44 - 1.80
Isobornyl acetate cns lb. .46 .56
Isobornyl formate, dms lb. 1.15 - 1.20
Isobornyl propionate, dms lb. 1.20 - 1.25
Isobutyl acetate, perfume grade, cns lb. .30 - .35
Solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutylene, 99%, tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23½- —
tanks, dlvd. lb. .19½- —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 - —
Isoeugenol, cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo 12.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .20½- —
dms., l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., l.c.l., dlvd lb. .25¼- —
tanks, dlvd. lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .19 - —
dms., l.c.l., same basis lb. .20 - —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 - —
dms., l.c.l., dlvd. gal. .68 - —
tanks, dlvd. gal. .43 - —

Isopropyl alcohol, 99%, c.l., dms., dlvd. gal. .60 - —
dms., l.c.l., dlvd. gal. .70 - —
tanks, dlvd. gal. .44 - —
Anhyd., c.l., dlvd gal. .62 - —
dms., l.c.l., dlvd. gal. .72 - —
tanks, dlvd. gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd. lb. .09½- —
dms., l.c.l., dlvd. lb. .11 - —
tanks, dlvd. lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works lb. .39½- —
bgs., l.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 - —

J

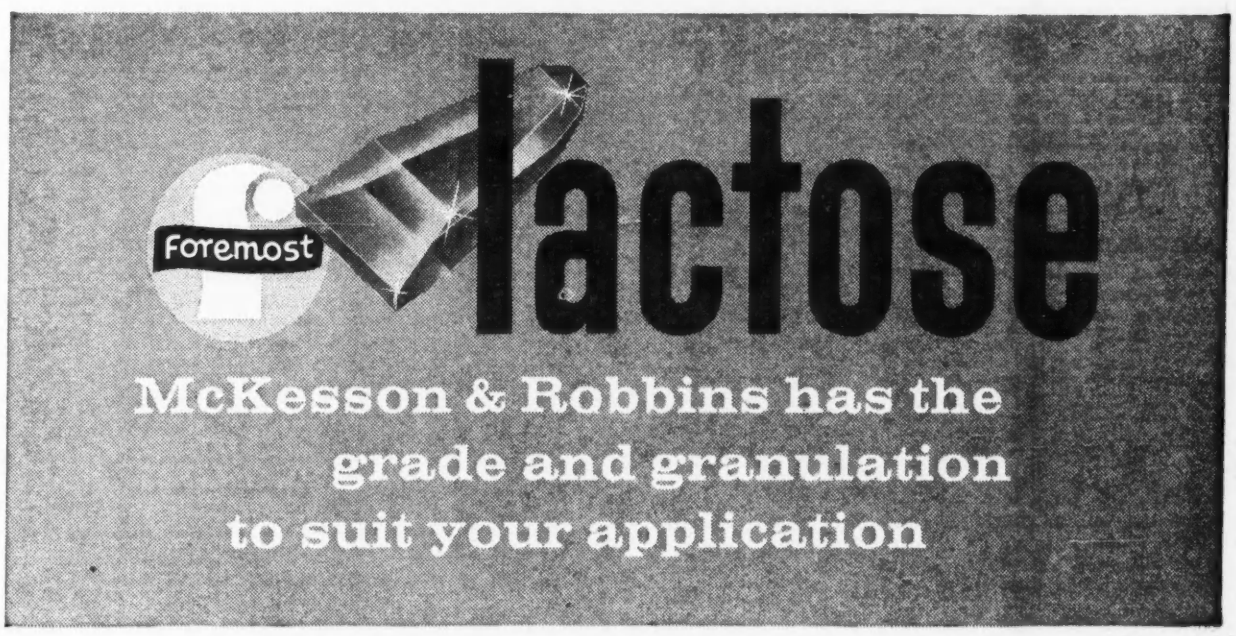
J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs lb. .29 - .31
Juniper berries, bgs. lb. .16 - .17
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½ - .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 .50
No. 2, powd., bbls. lb. .43 .45
No. 3, powd., bbls. lb. .37 .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .12

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston Texas gal. .16 - —
200°F.-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, food processing, 50%, dms., c.l., t.l., dlvd. N.Y., Phila. lb. .1936- —
dms., 20 or more, same basis. lb. .2036- —
dms., 5 to 19, same basis lb. .2086- —
dms., 1 to 4, same basis lb. .2136- —
Lactic acid, food processing, 80%, c.l., dms., same basis lb. .3336- —
dms., 20 or more, same basis. lb. .3386- —
dms., 5 to 19, same basis lb. .3436- —
dms., 1 to 4, same basis lb. .3486- —
Plastic grade, 50% c.l., bbls., works lb 2740 —
bbls., 20 or more, works lb 2790- —
bbls 5 to 19 works lb 2840 —
bbls., 1 to 4, works lb. .2890- —
80%, bbls., c.l., works lb. .4325- —
bbls 5 to 19 works lb 4725 —
bbls 1 to 4, works lb 4775- —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., l.c.l., works 100 lbs. 12.85 - —
USP, 85% cbys. lb. 85 - —
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. 14½ —
bgs., 2,000-lb lots, frt equald lb 14¾ —
bgs., 200-lb lots, frt equald lb 15¼ —
Edible lactose in fib dms. ½c higher
ferment, grade, bgs., c.l., works. lb. .08¾- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb lots, frt. equald lb. 22¼- —
200-1,980-lb. lots, frt. equald lb. 22¾ —
USP lactose in bags ½c to 1c lower
USP, spray dried, bgs., l.t., frt. equald lb. .18¼- —
bgs., l.t.l., frt. equald lb. .19 .19¼



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Lady's slipper root, bls ..... lb. 3.00 - 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP anhyd. 400-lb dms., works lb. .24 - .26
USP, anhyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP hydrous, 400-lb dms., works, lb .20 —
Lard, cash, dms., Chicago ..... lb. .09175- —
Lard oil (see Grease oil).
Larkspur seed bgs. ..... lb. .55 - —
Laurel leaf oil dms. cns. ..... lb 9.75 - 12.50
Laurent's acid, bbls ..... lb. .87 - —
Lauric acid, pure, dms ..... lb. .30¼- .32¾
bags ..... lb. .28¾- .31¼
tanks ..... lb. .27¾- —
Lauryl alcohol, hots ..... lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms. t.t.l., works lb .66 - —
Lavandin oil, 22-24%, dms. ..... lb. 1.15 - —
Abrial, dms. ..... lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls lb 20 - .25
Select., bls lb 90 - 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb 1.85 - 4.00
40-42% ester, cns. ..... lb. 3.50 - 3.65
Spike, Spanish, cns lb. 1.75 - 2.00
Lead acetate, NF, cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½- —
gran. bbls. lb. .26½- —
powd. bbls lb. .26½- —
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity frt alld on $150 or more lb. .30½- —
1-lb bgs., same basis lb .47 —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb. .17 - —
bbls., l.c.l., same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, 400-lb. fib. dms lb. .56 - —
Lead iodide NF V tars lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb. .38 - —
Lead metal, prime, pigs, New York. lb. .11 - —
St. Louis lb. .1000- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs., l.c.l., same basis lb. .1485- —
Lead naphthenate, liq., 16% Pb., dms., dlvd lb. .19½- —
24% Pb. dms., dlvd lb. .24¼- —
Solid, 32% Pb., dms. dlvd lb .31¾- —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb. .2675- —
Lead orthosilicate sel., 50-60% PbO, dms. works lb. .29¾- .34¼
Lead peroxide, tech powd., bbls lb. .45 - .50
Lead phthalate dibasic, dms. works, lb. .41 - —
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., works, frt equald. lb. .1375- —
bbls. l.c.l., same basis lb. .1475- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1395- —
bbls., l.c.l., same basis lb. .1495- —
96% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate precip, 23%Pb dms., lb. .49 - —
Lead salicylate, normal dms. works lb .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs point, frt. alld lb. .20 —
bgs., l.c.l., same basis lb .21 —
Lead sulfate (see Lead blue basic sulfate)
Lead tallate liq. 16% Pb. dms lb. .17¼- —
24% Pb, dms lb. .21¼- —
Solid, 30% Pb, dms lb. .26¾- —
Lead white, basic carbonate, bgs., c.l., shipt pt., frt. alld lb. .18 - —
bgs l.c.l same basis lb. .19 - —
Basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .16½- —
bgs., l.c.l., same basis lb. .17½- —
Lecithin, edible, tech. bleached, non-ret dms., c.l. works, lb. .14 - .15
non-ret dms. t.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret dms. t.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo. 14.20 - —
Lemon oil, USP, Calif., cns., dms. lb. 2.45 - 3.75
Messina, cns lb. 4.00 - 6.50
Lemongrass oil, cns., dms lb. 3.80 - 5.00
dl-Leucine, dms., 1 kilo, works kilo. 50.00 - —
Licorice root, gran, bls lb 13 —
Powd, bls lb 15 .16
Whole, bls. lb 09 .10
Lignaloe wood oil, Mexican, cns lb. 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb. 1,500.00
Lime, chemical (quicklime), bulk, c.l. 50,000 lbs works, E ton. 14.25 —
Chemical, hydrated, bgs., c.l. same basis ton. 17.25 —
spray, bgs. c.l. same basis ton. 18.25 —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican, dms lb. 5.50 6.00
West Indian, dms lb. 5.50 6.00
Expressed, West Indian, dms lb 6.50 7.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil dms lb 2.45 4.25
Syn., 98-100% dms., works lb 2.40 2.75
Linalyl acetate ex bois de rose 90-92% dms lb 2.65 4.50
96.98% dms lb 3.25 —
Syn., 98-100% dms., works lb 2.75 - —
Lindane, 25% formulation, to distributors dms. frt. alld. lb. 1.35 1.50
99%, tech. to formulators, 250-lb. dms., 5,000 lbs., dlvd lb. 2.13 - —
100-lb dms. 5,000-lbs. dlvd lb 2.15 - —
250-lb. dms. less than 5,000 lbs. dlvd lb 2.18 - —
100-lb dms. less than 5,000 lbs. dlvd lb 2.20 —
Linden flowers, with leaves bls lb .35 .40
Without leaves bls. lb .42 .45
Linseed meal, expeller, 32%, bulk, Minneapolis, mills ton. 62.50 - —
Extracted, 34%, bulk, same basis, ton. 56.50 - —
Linseed oil, raw, dms., c.l., New York lb. .1910- —
dms., l.c.l., New York lb. .2010- —
tanks, f.o.b. Minneapolis lb. .1550- —
tanks, New York lb. .1658- —
tankwagon, New York lb. .1683- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, dist., dms lb. .0000- .0000
Water white, dms lb. .2975- .31
Litharge, comi., powd., bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate dms. lb. 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd. dms., c.l., t.l., dlvd. or works, frt. alld lb. .87 - —
dms. l.c.l. same basis lb. .88 - .92
Lithium citrate NF dms. ton lots. lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd., dms., 500-lbs lots or more, works. lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .60 - —
dms., l.c.l., frt. alld lb. .64 - —
Lithium manganite, dms. works lb. .95 - 1.05
Lithium nitrate, tech. dms., 100-lb lots lb. 1.15 - 1.25
Lithium salicylate, dms. lb. 1.60 - 1.70
Lithium silicate, dms., works lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works lb. .48¼- —
dms., less-ton lots, works lb. .53½- —
Lithium sulfate, dms., 100-lb. lots. lb. 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone ord. bgs., c.l., dlvd E. lb. .06½- —
bgs., l.c.l., dlvd, E lb. .09¼- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l. dlvd. lb. .12 - —
Lobelia herb, bls lb. .95 - 1.10
Loheline sulfate, bots., 50-oz. lots, works oz. 30.00 - —
Locust bean gum powd., bgs. lb .35 - .40
Lycododium, cs. lb 2.50 - 3.00
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Sinaw No. 1, bls lb. 1.35 - —
No. 2, whole, bls lb. 1.25 - —
siftings, bls. lb. 1.15 - —
Mace oil, dist., cns., dms lb. 9.00 - 11.00
Magnesia, calcined, tech., bgs., cns., frt equald lb. .25¾- .26½
Tech, syn, rubber grade, light, bgs., c.l. frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs. l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs. c.l., f.o.b. Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis ton. 49.50 - —
95%, bgs., c.l. same basis ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton. 86.25 - —
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt equald lb. .11½- —
bgs. l.c.l. frt equald lb .13½- .14
USP, bgs., c.l., frt. equald lb. .13½- —
bgs. t.l. frt equald lb .14 —
bgs. l.c.l. frt equald lb .15 .16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works lb. .12¾- —
dms l.c.l., works lb. .14 .15
hydrous, 99%, flake, bgs., c.l., works ton. 60.00 —
bgs., l.c.l., works ton 75.00 - 100.00
Magnesium gluconate 100-lb dm., f.o.b. works E lb 1.43 —
Magnesium hydroxide, NF powd., dms., 500-lbs. or more, f.o.b. works lb. .34½- .35½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.l., frt alld. lb. .23½- —
tanks, frt alld. lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs., 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, same basis lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .78 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 —
bgs. l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs. l.c.l., 5,000 lbs., 1 withdrawal 100 lbs 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, 8b. dms., 5,000-lb. lots lb. .38 - —
8b. dms., 1,000-lb. lots lb. .40 - —
8b. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.
Malachite green, straight, PTA, bbls., works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride, dms c.l., frt. equald lb. .24 —
dms., l.c.l., frt. equald lb. .25½- —
tanks, frt equald lb 22½ —
Maleic anhydride in bags ½c. per lb. less.
Malic acid, tech., dms lb. .50 —
Mandelic acid, NF, dms., 1,000-lb. lots lb 2.35 —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .42 - .48
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton. 148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton. 144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher.
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF dms. lb. 3.53 - —
Manganese linoleate, liq. 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd, E lb. .34½- —
dms., ton lots, dlvd, E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾- —
Manganese resinate, fused, 3½% Mn dms lb 29¼- —
Precip, 6¼-7% Mn, dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd, S., E ton. 86.50 - —
bgs. l.c.l., dlvd S., E ton. 93.50 - —
75%, $MnSo_4$, 30-tons, same basis 85.00 —
Manganese tallate 6%, dms. lb. .26½- —
Manila copal gum, C, bgs lb. .35 - .39
DBB, bgs. lb. .24½- 28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 - —
fib dms., to ton lots, works lb. .62 - —
fib dms., single dm., works lb. .65 - —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf ports lb. .06¼- —
Menthol, nat USP, Brazilian, large crystals, cs lb. 7.35 - 7.60
Nat. USP Brazilian, regular crystals, cs lb. 7.25 - 7.50
Japanese, cs. lb. 10.00 - 10.50
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib, dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb. 4.03 - —
USP, gran. or powd., 50-lb dm., 100 lbs., f.o.b. works lb. 3.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm. f.o.b. works lb. 6.97 - —
Mercuric oxide, red, NF IX 50-lb. dm. 100 lbs. f.o.b works, lb. 4.72 - —
tech., 50-lb dm. 100 lbs., same basis lb 4.52 - —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb 4.89 - —
tech., dms. 100 lbs lb 4.35 - —
25-lb. fib dm lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP XV).
Mercury metal 76 lbs. per flask, net-flask. 197.00 - 200.00
Mesityl oxide dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb 12½- —
Meta aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine)
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 98%, dms., truckloads frt equald lb. .42½- —
dms. smaller lots, frt equald. lb. .43 - .75
tanks works frt. equald lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt alld gal. .85 - —
Syn., zone 1, dms., c.l., or t.l. min. dlvd gal. .51¼- —
dms., t.c.l., dlvd gal. .61½- —
Syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or dlvd. gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue, (calcium salt) 88% min., dms. t.l., frt alld. lb 1.10 - —
dms., t.t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb. 3.50 - —
Feed grade, 98% fib dms., same basis lb. 1.43 - —
Methoxychlor 50% wettable powder, dealers, dms. cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., t.c.l., same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret. dms., t.c.l., same basis, lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat. dms., t.c.l., E of Miss. frt alld gal. .62½- —
Syn., dms., c.l., frt. alld. E gal. .66 - —
dms., t.c.l., frt. alld. E gal. .76 - —
tanks frt alld E gal .51 —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼- —
dms., t.t.l., dlvd lb. .36¼- —
tanks, dlvd. lb. .32¼- —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd, E lb. .17 - —
dms., t.c.l., dlvd E. lb. .18½- —
tanks, dlvd E lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.90¼- —
dms., t.c.l., same basis lb. 2.00 - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.20 - 2.70
Methyl benzoate, cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., frt. allowed, frt alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb. bgs. 2,000-lb lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Refrigerator mfgs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb. .67¼ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .38 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .26 - —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works. lb. .27 - —
100-lb. multiwall paper bgs., t.t.l., works lb. .28 - —
Methyl heptin carbonate, bots lb. 27.25 - 29.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.80
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate).
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60½- —
dms., t.c.l., same basis lb. .62½- .67½
Methyl testosterone, USP, 100-gram, bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.33 - —
5-39 dm. lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA, bbls., dlvd, E. of Rockies lb. 2.95 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 - —
Methylene chloride, tech., straight or assorted, dms., c.l., tf t.l., dlvd lb. .12½- —
dms., t.c.l., t.t.l. dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).

A STRONG CASE TO PRESENT

This is the Mallinckrodt man with his green case, which signifies our progressive approach to supply and service. The 94 on the case represents the years of experience that have established the unexcelled Mallinckrodt reputation. With precise quality control techniques and forward-looking production methods, Mallinckrodt can offer you the finest pharmaceutical chemicals to be found anywhere. Take advantage of our superior products accented with top-notch service. Look for the man with the distinctive Mallinckrodt case. He'll be in to see you soon.

MALLINCKRODT

Mallinckrodt Chemical Works / St. Louis / New York / Montreal

Methylthionine chloride (see Methylene blue)
Mica, dry-grd., paint, plastic, 100 mesh, bgs, c.l., works lb .04 —
roofing 20 to 80 mesh works lb .03 —
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb .06½ —
bgs. t.e.i. ex-whse lb. .07¼ —
paint or lacq., bgs., c.l., 325 mesh works, frt alld E. lb. .08¼ —
bgs. t.e.i. ex-whse or freight alld. E lb .09 —
wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs. t.e.i. ex whse or frt. alld. E lb .08¾ —
wallpaper bgs. c.l. works, frt. alld. E lb. .08¾ —
bgs. ex-whse or frt alld E. lb .09 —
white 5-10 microns, bgs., c.l., works frt alld E lb .08¼ —
Mica, wet-grd W. of Miss ½c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 .11
laminating grades, tankcars, works lb. .11 .12
Mineral black bgs. works lb. .0160- .0672
Mineral oil, white tech. 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .70 - —
non-ret. dms., t.e.i., same basis gal. .75 - —
tankcars, refy. gal. .54 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½ - —
non-ret. dms., t.e.i., same basis gal. .75½ - —
tankcars, refy. gal. .54½ - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .71 - —
non-ret. dms., t.e.i., same basis gal. .76 - —
tankcars, refy. gal. .55 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.e.i., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .83 - —
non-ret. dms., t.e.i., same basis gal. .88 - —
tankcars, refy. gal. .67 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .85 - —
non-ret. dms., t.e.i., same basis. gal. .90 - —
tankcars, same basis gal. .69 - —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 .90
non-ret. dms., t.e.i., same basis gal. .925 —
tankcars, refy. gal. .69 .715
340-350 vis., nonret. dms., c.l., f.o.b. refy gal. .92½ - —
non-ret. dms., t.e.i. gal. .97½ - —
tankcars, refy. gal. .76½ - —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for t.e.i.).
Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., t.e.i., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. 25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. 145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston Texas gal. 17 - —
Mink oil, dms lb 2.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner kgs., c.l., works lb 6.30 —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .14½ - —
tanks, New York gal. .15½ - .16
Molybdated orange bbls. lb. .48 —
Molybdenum metal, powd., 80 or 200 mesh, cans., works kilo 7.84 - —
325 mesh, cans., works kilo 9.13 - —
Molybdenum trioxide purit., dms., works lb. 1.25 - —
Tech. chemical dms. works, basis Mo. content lb. 1.61 - —
Tech. metallurgical, dms., works basis Mo. content lb. 1.60 - —
Molybdic acid, 84%, dms., works. lb. 1.15 - 1.25
Monoallylamine, dms., c.l., dlvd lb 265 —
dms., c.l., dlvd lb. 995 - —
tanks, dlvd lb. 96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½ - —
dms., t.e.i., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 —
dms., t.e.i., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10½ - —
dms., t.e.i., same basis lb. .11½ - —
tanks, same basis lb. .08¾ - —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine, dms., c.l., dlvd. E lb. .27½ - —
dms., t.e.i., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylhydroxyethylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis lb. .38½ - —
dms., t.e.i., dlvd. E., 100% basis lb. .40 - —
tanks, dlvd E., 100% basis lb .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½ - —
dms., t.e.i., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½ - —
dms., t.e.i., same basis lb. .35 - —
tanks, same basis lb .31 - —
Monomethylamine, anhyd., cyls., t.e.i., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald 100% basis lb. .36 —
30-35% soln., dms., t.e.i. frt. equald, 100% basis lb. .36½ - —
tanks frt equald. 100% basis. lb. .26 —
40% soln. dms. frt equald., 100% basis lb. .33 - —
dms., t.e.i. frt equald 100% basis lb. .33½ - —
tanks, frt equald, 100% basis lb. .26 —
Monopentaerythritol, tech., bgs., c.l., dlvd lb. .29 - —
bgs., t.e.i. lb. .30 - —
Monopotassium glutamate, dms., 1,000 lb lots frt alld lb 3.05 - —
dms 100 lb lots same basis lb 3.25 —
Monosodium glutamate, dms. dlvd. lb. 1.07 1.15
Monosodium phosphate (see sodium phosphate, monobasic)
Montan wax, Calif., refd., bgs lb .27 .28
Imp., crude, Bohemian, bgs lb. .25 .26
German, bgs lb .25 .26
Morphine, cns 100-oz. f.o.b. works oz 12.35 —
Morphine hydrobromide, cns., 100-oz., f.o.b. works oz 9.90 - —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works oz. 9.90 - —
Morphine sulfate, USP, cns., 100-oz., f.o.b. works oz 9.90 - —
Morpholine, dms., c.l., dlvd. E lb. 55¼ - —
dms., t.e.i., dlvd. E lb. 56¾ - —
tanks, dlvd E lb. 52¾ - —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib, dms., 100-lb lots lb 4.40 4.90
cns., 25-lb lots lb 4.50 5.00
Ketone, fib, dms., 100-lb lots lb 4.80 5.10
cns., 25-lb lots lb 4.70 5.20
Xylol, fib, dms., 100-lb lots lb 1.26 —
cns., 25-lb lots lb 1.40 —
Mustard seed, Danish, yellow, bgs. lb. .08 - —
Montana, yellow, bgs lb. 10½ - —
Oriental, bgs. lb. .09 - —
Mustard oil, syn., bots. lb 1.60 1.85
Myristic acid, bgs. lb. .23¼ - .25¼
tanks lb. .22¼ - —
Myrrh gum, cs. lb. 65 75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Naphthalene, crude, dom., 78°, tanks, f.o.b., frt. equald lb. .06¼ - .06½
Reid, indust., chipped, crushed, bgs., frt. equald lb. .14½ - —
tanks, same basis lb. .11¾ - —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½ - —
cs. 50 lbs. c.l. same basis lb. 15¾ - —
1-lb. pkgs. c.l. same basis lb 18½ - —
a-Naphthol, dms. frt. alld lb 1.02 —
b-Naphthol, tech., flake, bbls., c.l., works lb .34 - —
bbls. t.e.i. works lb .36 - —
Naphthol "ITR" red toner, bbls. works lb 5.00 - —
1-Naphthol-3,8-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms. frt. alld lb. .83 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Naphthylamine-6-sulfonic acid (see Broenner's acid)
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib, dms. lb. 8.50 —
Neatsfoot oil, 15° cold test, dms lb .29 Nom.
20° cold test, dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 8.00
Neomycin sulfate, fib, dms., 1 kilo basis activity, gram. .18 - —
fib, dms., 100-999 gram lots, basis activity, gram. .25 - —
Tech., fib, dms. gram. 13½ - —
Neopentylglycol, dms., c.l., dlvd lb .32 —
dms., t.e.i., same basis lb .33 —
Neroi, dms. lb 4.75 —
Neroli oil, NF, French, bots. lb. 425.00 575.00
Tunisian, bots. lb. 400.00 —
Nerolin, cns. lb 2.45 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.50 —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .72 - .79
Nickel carbonate, bbls., dlvd lb. .83 - .90
Nickel chloride, bbls., dlvd. lb. .39½ - .47½
Nickel formate, bbls., ton lots, frt. alld lb. .78 - .79
Nickel metal, electro cathodes, cs., works lb. .81¼ - —
Nickel nitrate, dms., frt. alld lb. .34½ - .36½
Nickel oxide, black, bbls. lb. .92 - —
Green, bbls. lb. .91 - —
Nickel sulfate, bgs., c.l., dlvd lb. .30 - —
bgs., t.e.i., dlvd. lb. .30½ - .38
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd kilo. 5.75 6.50
dms., less than 100 kilos, dlvd. kilo. 6.25 7.00
Nicotinamide hydrochloride, 50-kilo dms., dlvd kilo. 6.50 7.50
Nicotine sulfate 40%, dealers, 50-lb. cans frt alld lb 1.20 —
40% manufacturers, 500-lb. dms., frt alld lb 1.05 —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .10¼ - —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs. 5.75 - —
cbys., t.e.i., works E 100 lbs. 6.05 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 —
cbys., t.e.i., works E 100 lbs. 6.55 7.35
40° Be., cbys., c.l., works E 100 lbs. 6.75 - —
cbys., t.e.i., works E 100 lbs. 7.05 7.85
42° Be., cbys., c.l., works E. 100 lbs. 7.25 —
cbys., t.e.i., works E 100 lbs. 7.55 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer, cbys., extra, c.l., works lb. .18½ - —
cbys. extra, t.e.i. works. lb. .20 —
5-pint bots. extra, cs., c.l., same basis lb. .22½ - —
5-pint bots. extra, cs., t.e.i., same basis lb. .24 .25
dms., frt alld lb. .99 - —
4-Nitro-2-aminophenol, tech., paste, dms., t.e.i., works lb. .64 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste, dms., frt. alld., 100% basis 1.10 - —
o-Nitroaniline, flaked, dms., t.i., frt. alld lb. .49 - —
dms., t.e.i., frt alld lb. .51 - —
o-Nitroaniline orange toner, kgs. lb. 1.50 - —
p-Nitroaniline, c.l., t.i., dms., 20,000 lb. min., dlvd lb. .44½ - —
dms., t.e.i., same basis lb. .46½ - —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .13 - —
dms., t.e.i., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .39½ - —
bbls., l.c.l., same basis lb. .42½ - —
18-25 cps., bbls., c.l., same basis. lb. .41½ - —
bbls., l.c.l., same basis lb. .44½ - —
250-400, 600-1,000 seconds, bbls., t.e.i., same basis lb. .44½ - .47½
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis lb. .44 - —
bbls., l.c.l., same basis lb. .47 - —
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .43 - —
bbls., l.c.l., same basis lb. .46 - —
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., t.e.i., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .28½ - —
dms., t.e.i., dlvd. E lb. .30 - —
tanks, dlvd E lb. .26 - —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works, unit-ton. 1.64 - —
Manufacturing type, same basis, unit-ton. 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 - —
Cyls. t.l., min. 5 tons, same basis lb. .07½ - —
Cyls. t.e.i., t.l.i., same basis lb. .15 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works, unit-ton 3.50 —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane, dms., t.i., dlvd. E lb. .26 - —
dms., t.l.i., dlvd. E lb. .27½ - —
Nitromethane prices West of Rockies are 1c higher
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.e.i., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld, E. of Rockies lb. .28½ - —
dms., t.e.i., same basis lb. .30 - —
tanks, same basis lb. .26 - —
1-Nitropropane prices West of Rockies are 1c per lb higher.
2-Nitropropane, dms., c.l., frt. alld, E of Rockies lb. .18½ - —
dms., t.e.i., same basis lb. .20 - —
tanks, same basis lb. .16 - —
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 - —
dms., t.e.i., frt alld. lb. .16 - —
tanks, frt alld lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½ - —
dms., t.e.i., works lb. .29 - —
flake, dms., c.l., t.l., works lb. .27½ - —
dms., t.e.i., works lb. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22½ - —
dms., t.e.i., frt. alld lb. .23½ - —
tanks, frt. alld lb. .20 - —
Nonylphenol prices on shipments to Western States are 2c. higher.
Noscapine, cns. oz. 8.00 - —
Nutmegs, East Indian, whole, bgs. lb. 1.26 - —
West Indian, bgs lb. 1.00 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 8.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 —
Powd., bbls., bxs. lb. .20 .22

O

Ocher (see Iron oxide, yellow, nat.).
Ocotea cymbarum oil, dms lb. .44 - .47
Octane, indust., tanks, Bayonne, N.J. gal. .30 —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .41½ - —
dms., l.c.l., dlvd. Zone 1 lb. .43½ - .44½
tanks, dlvd. Zone 1 lb. .37½ - —
Octyl alcohol, perfumers grade, bots. lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
n-Octyl-decyl alcohol blend, tanks, dlvd lb. .19 - —
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½ - —
dms., t.e.i., same basis lb. .55 - —
Octylphenol, bgs., c.l., works lb. .23½ - —
bgs., l.c.l., works lb. .25 - —
tanks, works lb. .21½ - —
Octylphenol in dms., 1½c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms lb. .15¾ - .16¼
tanks lb. .14¼ - .14½
Oleic acid, dbl.-dist. (white), dms. lb. .19 - .21½
tanks lb. .16½ - —
S. D., dms. lb. .18 - .20¼
tanks lb. .15½ - —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 .20
Tears, cs. lb. .22 .30
Olibanum oil, bots lb. 5.00 7.65
Extra fine, bots lb 8.00 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.30 - 2.40
Olivine, crude, works ton. 12.00 —
20 mesh, works ton. 15.00 - —
100 mesh works ton. 20.00 - —
Opium, USP, cns., 25-lbs., f.o.b. works oz. 19.20 - —
gran., cns., 50 lbs., same basis. oz. 21.65 - —
powd., cns., 50 lbs., same basis. oz. 21.65 - —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 - .90
Calif., sweet., cns., dms lb. .60 - —
Florida, cns., dms lb .40 .45
Messina, cns. lb. 3.25 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 .20
Sweet lb 28 30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 1.80 2.30
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bxs lb. .65 - —
Verona, bls lb. .35 - —
powd., bbls., bxs lb. .45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram 3.00 4.00
Ouricury, wax, crude, bgs. lb. .50 - Nom.
Refd., pure, bgs lb. .54 - .56
Oxalic acid, bgs., c.l., works lb. .18 - —
bgs., 10,000-lb. lots, works lb. .19 - —
bgs., smaller lots, works lb. .20½ - —
Oxalic acid in drums is priced ½c. per lb higher
o-Oxynaphthoic acid, pigment manufacture, dms., frt alld lb. .912 - —
Dyestuff manufacture, dms., same basis lb 1.03 - 1.14
Oxyquinolin sulfate, cns. 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

P

Palm oil, clarif., dms lb. .14¾ - .15¾
tanks, New York lb. .12 - —
Palm oil acid, double dist., dms. lb. .16 - .18½
tanks lb. .13½ - —
single dist., dms lb. .15½ - .18
tanks lb. .13 - —
Palmarosa oil, cns lb. 4.90 6.00
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 7.35
Paprika, Bulgarian, bgs lb. .32 - —
Hungarian, bgs. lb. .33 - —
Spanish, bgs. lb. .30 - —
Yugoslavian, bgs. lb. .38 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM tanks, refy. lb. .0655- .0660
Fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. 135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Paraformaldehyde 91% flake, bgs., c.l., frt. alld lb. .10 - —
bgs., t.e.i., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib, dms., c.l. f.o.b., works lb. .19 - —
fib, dms., 1,000-lb. lots, same basis lb. .20 - —
fib, dms., smaller lots, same basis lb. .21½ - —

Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. E.. lb. .14 - —
55-gal. dms., l.c.l., dlvd. E. lb. .15½- —
tanks, dlvd. E..... lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Passion flower herb, bls..... lb. .35 .40
Patchouli oil, imp., cns. ..... lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, tugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills..ton.66.00 Nom.
solvent, same basis .....ton.64.00 Nom.
Peanut oil, crude, tanks, f.o.b. mills, lb. .15⅝- —
Refd., dms. ..... lb. 20⅞- .21⅛
tanks ..... lb. .18⅞- —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt kilo. 4.52 - —
Pelargonic acid, dms., c.l., dlvd. E.lb. .27½- —
ton lots, same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Penicillin, potassium, cryst., bulk, 1,000,000 units....013 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil, USP, imported, cns. lb. 2.35 - 2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd. lb. .29 - —
bgs., l.c.l., dlvd..... lb. .30 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more. lb. 6.00 - —
Pepper, black, Malabar, bgs..... lb. .47½- —
Lampong, bgs. ..... lb. .47½- —
Red, Funtuas bgs. ..... lb. .32 - —
Japanese, Hontoka, bgs..... lb. .39 - —
Santaka, bgs. ..... lb. .31½- —
Sudanese, bgs. ..... lb. .56 - —
White, Muntok, bgs ..... lb. .56½- —
Peppermint leaves, dom., USP, bls., dms lb. No stocks.
imp., USP, dms. ..... lb. .85 - .90
Peppermint oil, nat., dms..... lb. 4.00 - 4.40
Redist., USP, dms ..... lb. 4.25 - 4.65
Perchloroethylene, dms., c.l., or t.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. ..... lb. .15¼- —
tanks, dlvd. ..... lb. .11¾- —
tanktruck, 1,000 gal. min. dlvd lb. .12¼- —
Peri acid, dry bbls., frt. alld.... lb. 1.60 - —
Paste, bbls., frt. alld..... lb. 1.55 - —
Peru balsam, dms ..... lb. 1.15 - 1.50
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.30 - —
Petrolatum, NF, cream, dms., c.l., refy. lb. .085 - 08625
dms., l.c.l., dlvd..... lb. .11125-11250
tanks, refy. ..... lb. .0625- .06375
NF, extra amber, dms., c.l., refy. lb. .07625- —
dms., l.c.l., dlvd..... lb. .1025- —
tanks, refy. ..... lb. .05375- —
NF, soft yellow, dms., c.l., refy lb. .07625- —
dms., l.c.l., dlvd. ..... lb. .1025- —
tanks, refy. ..... lb. .05375- —
USP, lily white, dms., c.l., refy. lb. .09125-.09675
dms., l.c.l., dlvd..... lb. .1175- .1225
tanks, refy. ..... lb. .06875- —
USP, snow white, dms., c.l., refy. .09625- —
dms., l.c.l., dlvd. ..... lb. .1225- —
tanks, refy. ..... lb. .07375- —
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works, lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works ..... lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works ..... lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld, E lb .91 - —
dms., l.c.l., same basis..... lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld, lb. 1.05 - —
dms., same basis ..... lb. 1.08 - —
Phenobarbital, USP, dms., 100-lbs., frt. alld..lb. 2.85 - 3.25
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret, dms., frt. alld E. of Rockies lb. .17¼- —
non-ret. dms., l.c.l., same basis. lb. .18¼- —
tanks, same basis..... lb. .15¼- —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17 - —
non-ret. dms., l.c.l., same basis. lb. .18 - —
tanks, same basis ..... lb. .15 - —
39°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .18½- —
non-ret. dms., l.c.l..... lb. .19½- —
tanks, same basis..... lb. .16½- —
Phenol, USP, syn., dms., c.l., t.l., frt. alld. ..... lb. .19 - —
dms., l.c.l., same basis..... lb. .21 - —
tanks, same basis..... lb. .17 - —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld..lb. 1.30 - —
250-lb. dm., same basis..... lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd..lb. .46 - —
fib. dms., ton lots, dlvd..... lb. .49 - —
NF, fib. dms., t.l., dlvd..... lb. .45 - —
fib. dms., ton lots, dlvd..... lb. .48 - —
Phenyl acetate, dms., 100-lb. lots, works..lb. .50 - —
Phenyl salicylate (see Salol).

Phenylacetaldehyde, coln., 50%, bots. lb. 2.15 - 2.35
100%, bots. ..... lb. 3.90 - 4.05
Phenylacetic acid, pure, cryst., ons. lb. 1.25 - 1.75
dl-Phenylalanine, dms., 1-kilo..kilo.65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E..lb. 3.45 - —
fib dms., smaller lots, dlvd. E. lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E..lb. .50 - —
dms., l.c.l., dlvd. E..... lb. .51½- —
tanks, dlvd. E ..... lb. .47½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld..lb. 1.08 - —
l.c.l., l.t.l., same basis ..... lb. 1.10 - —
o-Phenylenediamine, coml., fib. dms, 100 to 1,000 lbs., works, lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis..... lb. .76¼- —
Phenylethyl acetate, bots. ..... lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms.lb. 1.14 - 1.50
Standard, dms. ..... lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld. lb. 1.50 - —
dms., smaller lots, frt. alld... lb. 1.70 - 1.85
Phenylethyliphenyl acetate, bots. lb. 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms.lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works..... lb. .43 - —

Philippine copal gum, pale, chips, bgs lb. .23¼- .27
nubs, bgs. ..... lb. .23¼- .27
seeds, bgs. ..... lb. .20 Nom.
sorts, bgs. ..... lb. .20 - .24
Phlorogiucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works..... lb. 17.75 - —
Tech., fib. dms., works ..... lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works ..... lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.46.50 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 4.989 - 5.398
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 - 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 - 6.438
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.219 - 8.228
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis 100 lbs. 7.25 - 7.75
tanks, t.w., works....100 lbs. 5.60 - —

Phosphoric acid, food grade, 80%, cbys., c.l. frt equald 100 lbs. 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF 85%, cbys., c.l., works.100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., l.c.l., works..... lb. .14½- .15½
Solid, dms., c.l., works..... lb. .11½- —
dms., l.c.l., works ..... lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., l.c.l., works ..... lb. .1475- .1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. .38 - —
dms., l.c.l., works ..... lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works..... lb. .15 - —
tanks, works ..... lb. .12½- —

One oil guarantees full orange flavor every single time
It's Exchange Orange Oil, U.S.P., California Cold Pressed. Here's orange flavor as it should be—with the full flavor, aroma and color of California's finest oranges. And it is uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of quality oranges at their command, could bulk-blend an oil with such consistent flavor balance.
Always look for "Exchange" on the tamper-proof container seal—your guarantee it was pressed and packed by the Sunkist Growers. You can depend on it.
Sunkist Growers
Products Sales Department, Ontario, California
Exchange Brand Orange Oil is distributed in the U. S. by Dodge & Olcott, Inc.; Fritzsche Brothers, Inc.; Ungerer & Co.
Exchange

Phthalic Anhydride—Shingle Stain Oil

Phthalic anhydride, bgs., c.l., works, frt. equald .lb. .26 - —
bgs., l.c.l., same basis .lb. .21 - —
tanks, same basis .lb. .19½- —
Phthalimide, 97-99%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls. dlvd. E. of Rockies, lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb. 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1-000-lb. lots or more lb 5.00 - —
NF fib dms. lb 5.20 - —
a-Picoline dms. c.l., works, frt. equald lb. .46 - .48
dms., l.c.l., same basis lb. .46½- .49
tanks, same basis .lb. .43 - .46
b-Picoline 98% dms., t.l., works, lb. 1.05 - —
dms., l.c.l. same basis lb 1.15 - —
tanks same basis lb. .95 - —
b,g-Picoline 5°C. dms. c.l., works, lb. .32½- —
dms. l.c.l. works lb .33 - —
g-Picoline dms. f.o.b., works lb 1.60 - —
tanks, t.l. same basis lb 1.50 - —
Picric acid, NF bbls. lb. .85 - —
Tech., bbls lb. .50 - —
Pigment green B, kgs lb. 1.55 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate USP bots., vials, oz. 4.65 5.15
Pimento, Jamaican, bgs lb. .12 - —
Mexican, bgs. lb. .62 - —
Pimento berry oil, NF, dms. lb. 3.75 9.25
Pimento leaf oil, crude, cns lb 2.50 - 2.60
Pine oil, dest.-dist. dms., l.c.l. works lb. .15 - —
dms. l.c.l ex whse New York, lb. .173 —
Steam-dist. dms. ex whse., New York lb. .185 - —
dms. dlvd lb. .188 —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. lb. 2.25 - —
Piperazine anhyd. dms. c.l., frt. alld. E lb 1.80 - —
dms., l.c.l., frt alld E lb 1.85 - —
Piperazine citrate, 36% dms., 1,000 lbs. or more, frt alld lb. 1.33 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld lb. 1.20 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld lb. .90 - —
dms., 200-900 lbs., frt. alld lb. .93 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.11 - —
Piperidine, dist., 98% min., 5 dms. or more, l.c.l., l.t.l., f.o.b. works lb. 2.65 - —
1-4 dms., same basis lb. 2.75 - —
dms., c.l., t.l., frt. equald lb 2.55 - —
Piperonyl butoxide dms. dlvd E.lb 4.50 5.05

PITCHES

Pitch quotations are listed individually For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works oz.81.00 -85.00
Pleurisy root, bls. lb. .45 - .50
Podophyllum resin, NF, dms lb.12.50 -15.50
Poke root, bls. lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms. smaller lots, works lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum, chips, bgs lb. .23½- .26
Nubs, bgs. lb. .38 - .44
Poppy seed, Argentine, bgs. lb. No stocks.
Dutch, bgs. lb. .14 - —
Danish, bgs. lb. .14 - —
Polish, bgs. lb. .13 - —
Turkish, bgs. lb. .11 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., l.c.l., same basis 100 lbs 5.25 - —
tanks, same basis 100 lbs 3.70 - —
reg., flake, 78-92% dms., c.l. same basis 100 lbs. 9.55 - —
dms., l.c.l., same basis, 100 lbs.11.05 - —
solid, 88-92% dms., c.l. works 100 lbs 9.10 - —
dms. l.c.l., works 100 lbs.10.60 - —
Potassium acetate, NF, 200-lb dm., f.o.b. works, E lb .31 - —
Potassium bicarbonate, USP, gran. dms lb .22 - —
powd. dms lb .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs. l.c.l. works lb. .18½ 19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb bgs., c.l., frt. equald lb. .57 - —
100-lb bgs. 5,000 lbs. 1 shipt., same basis lb. .58 - —
100-lb bgs. smaller lots, same basis lb. .60 - —
Potassium borohydride powd. dms., works lb.16.00 22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb dms., c.l. frt alld lb. .49 - —
Potassium bromide USP gran., bbls. kgs lb. .39 - .40
Potassium carbonate, dom. NF, calc., bbls., cms lb. .22 - .24
Dom tech powd., bbls. dms lb .21 - .22
Dom calcinated, bgs. c.l. works, 100 lbs 8.50 - —
bgs. l.c.l. same basis 100 lbs 9.55 - —
Dom. hydrated 83-85% bgs. c.l. works 100 lbs /.10 - —
bgs. l.c.l. works 100 lbs 8.15 - —
Potassium chlorate cryst. dms. c.l., works lb. .12¼ - —
dms., l.c.l., works lb. .13½- .14½
Powd. dms. c.l., works lb .12¾ —
dms. l.c.l. works lb. .14 - .15
works lb. .12¼- —

Potassium Chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran., 25-lb. metal dms. lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, indust., 99.5% KCL, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton.34.00 - —
99.3% KCL, bulk, c.l., works ton.28.00 - —
bgs., c.l., works lb.33.00 - —
USP, cryst., dms lb.33.00 - —
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis, lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, dlvd. E lb. .42½- —
dms., 5,000-19,999-lb. lots, works lb. .43 —
dms., 2,000-4,999-lb. lots lb. .43½- —
dms., 1,999-lb. lots or less lb. .44½- .46½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .53 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms. smaller lots lb. .29 - —
Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms. l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .36 - .37
Potassium gluconate, 100-lb dm., f.o.b works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms, 1 to 100-dm. lots lb .33½- .36
Potassium hypophosphite, NF fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP cryst. gran., 250-lb. dm., f.o.b. works lb. 1.55 - —
Potassium manure salt, min. 20% K.O. bulk, c.l., works, unit-ton. .17 - .1765
Potassium metabisulfite, gran. dms., lb. .16 - —
Powd., dms lb. .17 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .36 - .37
bagged 60% minimum K_2O, same basis ton.26.00 -27.20
Gran., bulk, c.l., works unit-ton. .38 - .40
bagged, 60% minimum K_2O, same basis ton.27.80 -29.00
Inside prices apply to material contracted for prior to July 1, 1961.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF cryst., bbls., 20-ton lots 100 lbs.17.00 —
bbls., smaller lots 100 lbs.18.00 -19.00
gran., bgs., 20-ton lots 100 lbs. 9.50 —
bgs. smaller lots 100 lbs.11.00 -12.00
powd., bgs., 20-ton lots 100 lbs.10.50 —
bgs. smaller lots 100 lbs.12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b works E lb. .33 - —
Potassium pentaborate, gran. dms., c.l. works ton.219.50 - —
dms., ton lots, ex whse 100 lbs.17.48 - —
dms., smaller lots, ex whse 100 lbs.18.73 —
Powdered potassium pentaborate $10 per ton higher
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms. l.c.l. works lb. .19 - .20
Potassium permanganate, comt., kgs. works lb. .25 - .33
USP dms. works lb. .29 - .35
Potassium pyrophosphate, tetrabasic, dms., works lb 1475- 1575
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 - —
40.5° Be 1:2.1, dms., c.l., works, 100 lbs. 5.95 - —
dms. l.c.l., 5 dm. lots or more, works 100 lbs 6.70 - —
tanks, works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs.17.80 - —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms. l.c.l., 5-dm. lots or more, works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 - —
Potassium silicofluoride, bgs. works lb .09½- .10
Potassium silicofluoride in drums, 0.4c per lb higher
Potassium stannate, dms. frt. alld. lb. .850 - .912
Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works unit-ton. .65½- .67½
Inside price applies to tonnage contracted for prior to July 1, 1961.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate, NF VII, cryst., dms., lb. .31 .33
NF VII, gran. 400-lb. dm. lb. .32 —
NF VII, powd. 400-lb dm lb. .17 —
Potassium sulfocyanate, NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms. works lb. .96 .98
Tech., dms., works lb. .77 .79
Potassium titanate, ctns. c.l., works, lb. .16¼- —
ctns. 5-ton lots, works lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price, ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF gran. or powd. 250-lb dms., c.l., works E lb. 42½- —
250-lb dms. 5,000-lb lots, same basis lb. .43 - —
250-lb dms. same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms. works lb. .39 .40
Potassium-zirconium flouride, fib. dms., c.l., works lb. .50 - —
fib dms., l.c.l., works lb. .52½- .55

Pregnenolone, bots. .gram. No prices.
Pregnenolone acetate, bots. .gram. No prices.
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots, frt. alld. lb. 2.10 - 2.38
USP, ampule grade, dms., 1,000-lb. lots, frt. alld. lb. 2.40 - —
dms., 500 lbs. lb. 2.45 - —
dms., 100 lbs. lb. 2.50 - —
Progesterone, USP, bots. gram. No prices.
Pregnenolone acetate, bots. gram. No prices.
Propenyl guaethol, dms. lb.24.30 -27.00
b-Propriolactone, tech., dms., c.l., f.o.b. works lb. .47½- —
dms., l.c.l., t.l., same basis lb. .48½- —
tanks, same basis lb. .45 - —
Propionic acid syn., pure, dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., dlvd. lb. .24¾- —
tanks, dlvd. lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd, lb. .14¾- —
dms., l.c.l., dlvd lb. .16¼- —
tanks, dlvd. lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - .15
dms., l.c.l., dlvd lb. .15½- .16½
tanks, dlvd. lb. .11½- .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 - 4.40
n-Propyl-p-hyroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.53.00 —
bots., smaller lots kilo.55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 —
dms., l.c.l. same basis lb. 1.258 - —
n-Propylene dichloride consumers', dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0995- —
tanks, same basis lb. .07 - —
higher same basis
Propylene dichloride prices in West 1c.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .15 - —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12½- —
USP dms., c.l., dlvd. E lb. .17 - —
dms. l.c.l., same basis lb. .18¾- —
tanks, same basis lb. .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide dms., c.l., dlvd E, lb. .17 - —
dms., l.c.l., dlvd. E lb. .18½- —
tanks, dlvd. E lb. .14½- —
Psyllium seed, black, bgs lb. .42 - .45
Blonde bgs lb. .18 - .20
Husks, bgs. lb. .45 - .48
Pumice, dom., grd., coarse to fine, 0, ½ 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03¾- —
Imp., Italian, silk-screen, coarse, bgs. ton lots lb. .06½- —
fine, bgs. ton lots lb. .04 - —
sun dried, coarse, bgs ton.60.00 —
fine, bgs. ton.80.00 -70.00
Pumpkin seed, bgs lb. .35 - .36
Pyrethrins, syn (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .80 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb. .71 - —
Pyrethrum liquid, 20-1 basis (2 grams pyrethrins per 100cc odorless base) dms. works, gal. 9.60 - 9.80
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal.45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb.11.00 -11.35
purif., 20%, dms., works lb.11.00 -11.35
Pyridine, denat., dms. c.l. works and frt. equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2° non-ret., dms., c.l., same basis lb. .75½- —
dms., l.c.l., same basis lb. .76 - .76½
tanks, same basis lb. .71 - —
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works lb. .18 - .21
Pyridoxine hydrochlortide, USP 500-gram bots., dms., f.o.b. works kilo.95.00 -100.00
Pyrites, Canadian 48-50% S, mines, long-ton. 4.50 - 5.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid tech. bbls., 100-lbs., f.o.b., works lb 3.50 - —
Pyrogallol, NF 100-lb dms lb. 3.50 - —
Pyroxylin, USP, bots lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 1.75 - 2.00
Quinidine sulfate, USP, 1,000-oz. dm oz. .78½- —
Quinine, NF, 1,000-oz. dm. oz. .3750- —
Quinine bisulfate USP, 1,000-oz. dm. oz. .38 - —
Quinine hydrochloride, 1,000-oz. dm. oz. .3650- —
Quinine sulfate USP, 1,000-oz. dm. oz. .3150- —
Quinoline dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 - —
Powd., dms., c.l., t.l., frt. alld., 100% basis lb. 1.08 - —
Rapeseed oil, dms. lb. .19 - .19½
tanks lb. .17½- —
Rare earth oxalate, NF, 45-50%, bgs. works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS

Red pigment quotations are listed individually For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

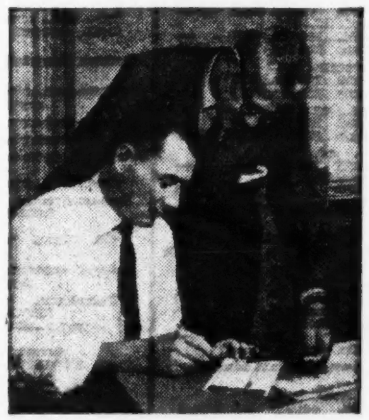
Red precipitate (see Mercuric oxide, red).
Red toner Lake C, alizanine, bbls., works lb. 1.30 - —
Reserpine, cryst. bots gram. 1.25 - —
Resorcinol, tech. grade, bgs., c.l., works, frt equald lb. .77½- —
bgs., l.c.l., same basis lb. .78½- —
Resorcinol in dms. 1c. per lb more.
Resorcinol monoacetate, NF dms. lb. 2.50 - —
USP, powd., dms., works lb 2.95 - —
Rhatany root, ogs lb 14 - .16
Rhodamine red toner, moiybdated, PMA, kgs. works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb.43.00 -51.00
Synthetic lb.14.00 -16.00
Rhubarb root, India, whole, bgs. lb. .22 - —
powd., bgs. lb. .25 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo.36.00 - —
Riboflavin-5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo.104.70 - —
Rice bran oil, clarified, dms., l.c.l. lb. .15½- —
tanks, dlvd. E lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots lb.1,152.00- —
Turkish, bots., otto lb.600.00 -700.00
absolute lb.145.00 - —
Rosemary oil, Spanish, NF, cns., dms lb. 1.15 - 1.20
Spanish, tech., cns., dms lb. .80 - .90
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45% fib. dms., works, unit-lb. .10¼- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 2 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb. 2.75 3.00
Rutin, NF fib. dms., 10 kilo lots, kilo.11.00 - —
fib. dms., 5 kilo lots kilo.11.50 - —
fib. dms., 1 kilo kilo.13.00 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.35 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 3.50 - —
Saccharin, USP, gran., soluble, dms., 1,000-lb. lots lb. 1.50 - —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble, dms., 1,000-lb. lots lb. 1.55 - —
dms., smaller lots lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, dms., New York lb. .2070- .38
tanks, Atl. coast lb. .1870- —
Saffron, Mancha Superior, tins lb.19.50 - —
Safrol, dms. lb. .85 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .15 - —
Italian, cns. lb. .19 - —
Sage oil, clary, bots lb.12.00 -15.00
Dalmatian, cns. lb. 2.65 - 3.25
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b., plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb. 1.05 - —
Salicylic acid, tech., fib. dms., c.l., t.l., dlvd lb. .40½- —
fib. dms., l.c.l., dlvd lb. .44¼- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .51¼- —
200-lb. fib. dms., less than 1,000 lbs lb. .54¼- —
100-lb. fib. dms., 1,000 lbs. or more lb. .53¼- —
100-lb. fib. dms., less than 1,000 lbs lb. .56¼- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .58¼- —
100-lb. fib. dms., less than 1,000 lbs lb. .61¼- —
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol, 25c per lb. higher.
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs., c.l 100 lbs. 1.34 - —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs., lb. .55 - .60
powd. fib. dms lb. .75 - .80
Sandalwood oil, cns lb.26.00 -30.00
Sarcosine, tech., tanks, f.o.b., works, frt. equald lb. 1.03 —
lb. No stocks.
Sassafras oil, artif., dms lb. .45 - —
Nat., dom., dms lb. 1.40 - —
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd. bgs. frt alld. 100% basis, lb. .96 - —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz.13.50 - —
Sebacic acid, CP bgs., c.l., works, lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs. c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .33
Selenium, powd., 99½%, dms., dlvd. lb. 6.50 - —
Senega root, bls lb. 2.40 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .33
sittings lb. .16 - —
Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls lb. .18 - —
No. 3, bls lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 6.50 - —
Sesame oil, USP, dms., l.c.l lb. .37 - .38
Sesame seed, Colombian, bgs lb. .15½- —
Lebanese, hulled, bgs lb. .19 - —
Nicaraguan, hulled, bgs lb. .21 - —
nat., bgs. lb. .15 - —
Salvadorian, Nat. bgs lb. .18 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .47 - —
dms., l.c.l., works lb. .53 - .90½
bbls., 1,500-lb. lots lb. .48 - —
kgs., 1,500-lb. lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd. ogs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .38
lemon No. 2, bgs., 10-bg. lots, lb. .34 .37
superfine, bgs. 10-bg. lots lb. .33 .34
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .40 - —
tanks, works gal. .35 - —

Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06½ -	.12¼
paper bgs., l.c.l., works	lb.	.06¾ -	.17¾
Raw, paper bgs., c.l., works	lb.	.06¾ -	.16¾
paper bgs., l.c.l., works	lb.	.07 -	.17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton	25.00 -	—
bgs. l.c.l. works, ex whse.	ton	45.00 -	65.00
Silica, hard-quartz, 99½ %, 325 mesh, bgs., c.l., works	ton	20.00 -	—
bgs., l.c.l., works	ton	25.00 -	—
99½ %, 140 mesh, bgs., c.l., works	ton	15.00 -	—
bgs., l.c.l. works	ton	20.00 -	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.20 -	—
tanks, works	lb.	.15 -	—
Silver bullion, ingots, cs	Troy oz.	.91¾ -	—
Silver cyanide, bots., 1,000-oz. lots,	oz.	.94¾ -	—
bots., 500-oz. lots	oz.	.95¼ -	—
bots., 100-oz. lots	oz.	.96¼ -	—
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works	oz.	.67¼ -	—
bots. 250-500 oz. same basis.	oz.	67¾ -	—
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate mild, USP, 16-oz. bots	oz.	1.46 -	—
Snakeroot oil, Canada, ens	lb.	40.00 -	43.00
Soapbark, crushed, bls.	lb.	.35 -	—
Powd., bls.	lb.	.40 -	—
Whole, bls.	lb.	.25 -	—
Soda ash dense, 58%, paper bgs., c.l., works 100 lbs.		1.90 -	—
paper bgs., l.c.l. stock pts., 100 lbs.		3.00 -	4.77
bulk c.l., works 100 lbs		1.60 -	—
Light, 58%, paper bgs., c.l., works 100 lbs.		1.85 -	—
paper bgs. l.c.l. stock pts.			
bulk, c.l., works 100 lbs.		1.55 -	—
100 lbs.		3.95 -	4.72
Soda caustic, flake 76%, dms., c.l., works, frt equald 100 lbs.		5.20 -	—
liq. 50% sellers tanks works, dry basis 100 lbs.		2.90 -	—
50% rayon type sellers tanks, works dry basis 100 lbs.		2.90 -	3.00
Liq. 73%, sellers' tanks, works, dry basis 100 lbs.		3.00 -	—
liq. 73% rayon type sellers' tanks, works, dry basis	lb.	3.00 -	3.10
solid 76% dms. c.l., works, 100 lbs.		4.80 -	—
Soda sal conc. bgs. c.l. works. 100 lbs.		2.50 -	—
bgs. smaller lots, works 100 lbs.		2.80 -	—
Sodium acetate annyd., bgs., c.l., dlvd. E	lb.	.14½ -	—
bgs., l.c.l., same basis	lb.	.16½ -	—
NF 60% gran. dms. c.l., works.	lb.	.15½ -	—
dms. l.c.l., works	lb.	.17½ -	—
Sodium alginate, NF, white powd., dom. 300 lbs. or more	lb.	1.02 -	—
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted	lb.	1.90 -	—
Sodium antimoniate bgs. c.l. dlvd. E	lb.	.27½ -	—
bgs., l.c.l., dlvd. E	lb.	.29 -	—
Sodium arsenate 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works	lb.	.24 -	—
ton lots or more, same basis,	lb.	.23½ -	—
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works	lb.	.18½ -	—
1,600-1,900 dms., same basis	lb.	.19 -	—
100-500 dms., same basis	lb.	.20 -	—
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works	kilo.	6.35 -	—
less than 100-kilos	kilo.	6.60 -	—
Sodium benzoate tech., dms., c.l., t.l., frt. alld	lb.	.35 -	—
dms., l.c.l., same basis	lb.	.39 -	—
USP, 100-lb. dms., ton lots, same basis	lb.	.43 -	—
100-lb. dms., 1,000-lb. lots, same basis.	lb.	.43 -	—
Sodium bicarbonate USP, gran., bgs., c.l. works 100 lbs.		2.95 -	—
bgs., l.c.l., works 100 lbs.		3.85 -	—
USP powd., bgs. c.l., works, 100 lbs.		2.55 -	—
bgs., l.c.l., works 100 lbs.		3.45 -	—
Sodium bichromate, gran., bgs., c.l., t.l., works	lb.	.13 -	—
bgs., l.c.l. works	lb.	.13½ -	.14¼
Sodium bichromate in dms ¼c. per lb higher			
Sodium bifluoride, fib, dms., c.l., works, frt. equald	lb.	.19½ -	—
fib, dms., l.c.l., same basis	lb.	.2025 -	—
Sodium bisulfate bulk c.l. works, 100 lbs.		2.00 -	—
dms. c.l., frt. equald 100 lbs.		3.00 -	3.60
dms., l.c.l., frt. equald 100 lbs.		3.50 -	4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs.		5.00 -	—
bgs., l.c.l., works 100 lbs.		5.45 -	—
Soln., 35° bbls. c.l., works 100 lbs.		1.70 -	—
bbls. l.c.l., works 100 lbs.		2.20 -	—
Sodium borate (see Borax)			
Sodium borohydride powd., dms., c.l., works	lb.	8.00 -	—
dms., l.c.l., works	lb.	11.75 -	14.00
stabilized water soln., 12% NaBH, 100% basis, tanks, works	lb.	7.50 -	—
dms., same basis	lb.	11.50 -	13.00
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.			
Sodium bromide USP, gran., dms., works	lb.	.40 -	—
Sodium carbonate, cryst., monohydrated (see Soda, sal).			
Sodium carbonate, monohydrated, bgs., l.c.l., works 100 lbs.		3.50 -	—
bgs., c.l., works 100 lbs.		3.10 -	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium chlorate, cryst., 350-lb. dms., c.l., works	lb.	.09 -	—
dms., l.c.l. works	lb.	.09½ -	.10¼
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.			
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.05 -	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58 -	—
dms., 20-dm lots or more, works.	lb.	.55 -	—
dms., smaller lots, works	lb.	.70 -	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27 -	—
dms., l.c.l., works	lb.	.28 -	—
Sodium chromate, anhyd. fib, dms., c.l., t.l., works	lb.	.14¾ -	—
fib dms l.c.l. works	lb.	.15¼ -	.16¼
Tetrahydrate, bgs., c.l., t.l., works,	lb.	.1013 -	—
bgs. l.c.l.	lb.	.1065 -	.1190
Sodium citrate anhyd., 200-lb. dm., f.o.b. works E	lb.	.52 -	—
NF VIII, gran. bgs., c.l., same basis	lb.	.26 -	—
USP XIV, gran., bgs., c.l., same basis	lb.	.29 -	—
Sodium citrate, USP powd prices ½c. higher.			
Sodium cyanate, dms. 1,000-lb. lots, works	lb.	.83 -	—
dms., smaller lots, works	lb.	.90 -	1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., dlvd., E. of Rockies, 20,000-lb. lots	lb.	.188 -	—
dms., same basis, 5,000 to 19,999-lb. lots	lb.	.203 -	—
dms., same basis, 2,000 to 4,900-lb. lots	lb.	.208 -	—
dms., same basis, 1,999-lb. lots and under	lb.	.218 -	—
Sodium cyclamate, 100-lb. dm., f.o.b. works	lb.	1.95 -	—
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works	lb.	.18 -	—
250-lb dms., l.c.l., works	lb.	.18¾ -	—
Tech., 33-35% acetic acid, dms., l.c.l., works	lb.	.15 -	—
250-lb dms., l.c.l., works	lb.	.15¾ -	—
Sodium dimethyl dithiocarbamate, 40% soln. dms., c.l., t.l., frt. alld., 100% basis	lb.	.42 -	—
dms., l.c.l., t.t.l., same basis	lb.	.47 -	.53
tanks, same basis	lb.	.38 -	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½ -	—
bgs. smaller lots	lb.	.14¼ -	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390 -	—
fib. dms., l.c.l., works, frt. equald	lb.	.1465 -	—
Sodium formate, bgs., c.l., works. 100 lbs.		7.05 -	—
bgs. l.c.l., ex whse 100 lbs.		8.65 -	—
Sodium gentisate, 100-lb. fib. dms.	lb.	5.50 -	—
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E	lb.	.84 -	—
Tech., bgs. c.l., t.l., same basis	lb.	.94 -	—
Sodium hydride, 50% soln. in oil, dms., works	lb.	1.35 -	2.50
25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point.	lb.	2.20 -	—
dms., 50-99 lbs., same basis	lb.	1.77 -	—
dms., 100-999 lbs., same basis	lb.	1.20 -	—
Sodium hydride, dms., 1,000 lbs. or more, same basis	lb.	.95 -	—
Sodium hydrosulfide (see Sodium sulfhydrate).			
Sodium hydrosulfite, dms. c.l., frt. alld.	lb.	23½ -	—
dms., l.c.l., frt. alld.	lb.	25¾ -	—
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots.	lb.	13¼ -	.38
Sodium hydroxide, tech. (see Soda, caustic).			
Sodium hypophosphite, NF, dms., 1,000-lb. lots	lb.	.99 -	—
Sodium hyposulfite (see Sodium thiosulfate).			
Sodium iodide, USP, 300-lb. dms., f.o.b. works	lb.	2.13 -	—
Sodium lauryl sulfate, dms., c.l., dlvd.	lb.	.20½ -	—
dms., l.t.l., dlvd.	lb.	.21½ -	—
tanks, dlvd.	lb.	.19½ -	—
Sodium lignin sulfonate, bgs., c.l., works 100 lbs.		4.25 -	—
l.c.l., bgs., works 100 lbs.		4.75 -	5.25
Sodium metabisulfite (see Sodium bisulfite).			
Sodium metaborate, octahydrate, gran., bgs., c.l., works	ton	210.00 -	—
bgs., ton lots, ex whse. 100 lbs.		8.30 -	—
Sodium metaborate, octahydrate, gran., bgs., smaller lots, ex whse. 100 lbs.		9.61 -	11.61
Tetrahydrate, bgs., c.l., works.	ton	210.00 -	—
bgs., ton lots, ex whse 100 lbs.		14.83 -	—
bgs., smaller lots, ex whse 100 lbs.		16.96 -	18.08
Sodium, metallic, bricks, c.l., works.	lb.	.21 -	—
Fused, 18,000-lb. lots or more, works	lb.	.19½ -	—
tanks, works	lb.	.17 -	—
Sodium metaminate, bbls., frt. alld.	lb.	.62 -	—
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt	100 lbs.	11.10 -	—
bgs., l.c.l., same basis	100 lbs.	11.85 -	—
dms., c.l., same basis	100 lbs.	11.70 -	—
dms., l.c.l., same basis	100 lbs.	12.45 -	—
Sodium metasilicate, anhyd., bgs. c.l., works	100 lbs	5.70 -	—
bgs., 6,000-19,900 lb. lots, works.	100 lbs	6.05 -	—
dms., c.l., works	100 lbs	6.20 -	—
dms., l.c.l., works	100 lbs	6.55 -	—
Pentahydrate, bgs., c.l., works.	100 lbs.	4.45 -	—
bgs., l.c.l., works	100 lbs	4.80 -	6.75
dms., l.c.l., works	100 lbs	4.95 -	—
dms., l.c.l., works	100 lbs	5.30 -	7.25
Sodium molybdate, annyd., dms., works, frt. equald	lb.	1.02 -	1.21
Cryst., dms., works, frt. alld	lb.	.84 -	.86
Sodium monoglutamate (see Monosodium glutamate)			
Sodium monohydrate (see Sodium carbonate monohydrated)			
Sodium naphthionate, bbls.	lb.	.77 -	—
Sodium nitrate, dom., crude, bgs., c.l., works	ton	42.00 -	—
bulk, c.l., works	ton	44.00 -	—
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse	ton	48.00 -	—
bulk, c.l., same basis	ton	44.00 -	—

How to get paid 3¾% interest for buying on the installment plan



Sign up and you're saving. You can put any size "installment" you want into Savings Bonds on the Payroll Savings Plan—even 63¢ a day. In 40 months this amount adds up to $750 saved and $250 earned at maturity.

Ever hear of a payment plan that has no interest or carrying charges, and pays you 33⅓¢ for every $1 installment you make? There is one, you know—the Payroll Savings Plan for U.S. Savings Bonds. Your payroll clerk will set aside any size installment you wish (as little as $1.25 a week) and as the money accumulates, buy your Bonds. You can cash them with interest anytime you need them. But hold them for 7 years, 9 months, and the Government pays you at the rate of 3¾% a year, compounded every 6 months—$4 guaranteed for every $3 you invested!

You can't lose your money. If your Savings Bonds are lost or destroyed, they're replaced free. A record of every Savings Bond purchased is sealed on film at the Treasury Dept.

The beauty of Savings Bonds

• You can save automatically on the Payroll Savings Plan, or buy Bonds at any Bank • You now earn 3¾% to maturity, ½% more than ever before • You invest without risk under a U.S. Government guarantee • Your Bonds are replaced free if lost or stolen • You can get your money with interest anytime you want it • You save more than money—you buy shares in a stronger America.

Peace costs money. Every Savings Bond you buy helps keep our country strong for Peace . . . so you can enjoy the things you're saving for.

You save more than money with U.S. Savings Bonds

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20th ANNIVERSARY 1941 1961

Sodium Nitrite—Theobromine and Sodium Acetate

Sodium nitrite, USP, bbls., c.l., works, frt. equald..100 lbs. 9.40 - —
bbls., l.c.l., same basis..100 lbs.11.40 - —

Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65

Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90

Sodium oxalate, 88%, bgs., works. 100 lbs.12.35 - —
99%, bgs., works 100 lbs.15.40 - —

Sodium para-aminobenzoate (see Sodium p-aminobenzoate).

Sodium para-aminosalicylate (see Sodium p-aminosalicylate).

Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms. l.c.l., same basis lb. .26½- .33

Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —

Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs. l.c.l. works lb. .19 - .21

Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½

Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —

Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms. lb. .55 - .56

Sodium phosphate, dibasic, anhyd., bgs., c.l. frt. equald 100 lbs. 8.10 - —
bgs., l.c.l., same basis 100 lbs. 8.50 - 9.55

Dibasic, cryst., bgs., c.l., t.l., frt. equald...100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90

Sodium phosphate, duohydrate, bgs., c.l., frt. equald..100 lbs. 7.75 - —
bgs., l.c.l., same basis..100 lbs. 8.25 - —

Monobasic, anhyd bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., same basis 100 lbs. 9.55 -10.15

Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.15 - —
bgs., l.c.l., frt. equald 100 lbs. 9.60 -10.20

Sodium phosphate in dms. 60c. to 80c. higher than bgs.

Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½

Sodium picramate, tech., paste, dms., f.o.b. works, frt. equald lb. .90 - —

Sodium propionate, any quantity, dms., dlvd. E. of Rockies. lb. .37 - —
Prices W of Rockies 3c. per lb. more.

Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs.11.25 - —
bgs., l.c.l., same basis 100 lbs.12.00 -12.50

Ferric, dms., c.l., t.l., works....lb. .36 - —
dms., l.c.l. works.....lb. .37 - .39

Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 8.30 - —

Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs. dms.lb. .81½- —

Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
l.c.l., dlvd. zone 1.....100 lbs. 4.10 - 4.35
dlvd. zone 2 .....100 lbs. 4.35 4.60
dlvd. zone 3 .....100 lbs. 4.75 4.90
dlvd. zone 4 .....100 lbs. 5.35 5.60

Sales zones are (1) All states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 96° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W of 96°, Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l. works 100 lbs. 5.70 - —
dms. c.l., t.l., works 100 lbs. 6.20 - —
hydrated, bgs., c.l., works.100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —

Sodium silicate, liq., 40° Be., 1:3.2, turbid, dms., c.l., works. 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —
47° Be., 1:2.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1.3.2, bgs., works ton.67.50 - —

Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., l.c.l., works lb. .725 - —

Sodium silicofluoride in dms., 0.4c. per lb. higher

Sodium stannate, dms., works, frt. alld. E. lb. .717 - .860

Sodium sulfa drugs (see Sulfa name).

Sodium sulfanilate, bbls., works lb. .22 - —

Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd. bgs., c.l., dlvd. E. ton.56.00 - —

Tech., detergent, rayon grade, bgs., c.l., works ton.38.00 - —
bulk, c.l., works ton.34.00 - —

USP, cryst., fib dms. lb. .17½- .18

Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq. 40-44% tanks, works, 100% basis ton.130.00 - —

Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —

Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l. same basis 100 lbs 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs. l.c.l., same basis 100 lbs. 7.95 - —

Sodium sulfocyanide, CP (see Sodium thiocyanate).

Sodium tetraborate (see Borax).

Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l. same basis lb. .05½- —

Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .90 - —
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —

Sodium thiosulfate NF, cryst., bbls. lb. .13½- —
Tech., anhyd. 100-lb. bgs. c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs. l.c.l., t.l., frt. equald 100 lbs. 8.15 - —
photograde, 64-lb. bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb. bgs. l.c.l. t.l., frt. equald lb. .0815- —

Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald..100 lbs. 4.95 - —
100-lb. bgs., l.c.l., t.l., frt. equald 100 lbs. 5.20 - —

Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —

Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt. alld E lb. .42 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.

Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
bgs., l.c.l., same basis 100 lbs. 8.65 - —
bulk, hopper cars, same basis. 100 lbs. 7.35 - —

Sodium tungstate, tech., kgs. dlvd. E lb. 1.32 - —

Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —

Sodium-carboxymethyl cellulose (see CMC).

Sodium-cinchophen (see Cinchophen-sodium).

Sodium formaldehyde sulfoxylate, dms., t.l., dlvd lb. .22½- —
dms., l.t.l., same basis lb. .23 - —

Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —

Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 - .35½
Petroleum, straight, aromatic, 310°-360F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York.gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C. m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322-393°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal. .28 - —

Sorbitan monostearate fib dms., 20,000-lb lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works. lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41

Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works. lb .25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —

Sorbitol, soln., coml., aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
tanks, works lb. .23¼- —

Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½

Soybean meal, 44%, bulk, unrestricted, Decatur..ton.65.00 - —

Soybean oil, crude, tanks, Decatur, lb. .10½- —

Foots, soapstock acid 95%, tanks, New York lb. .0675- —

Alkali, refd., dms. lb. .1480- .1505
tanks lb. .1280- —
Clarified, dms. lb. .1430- .1455
tanks lb. .1230- —
Salad, refd., dms. lb. .14⅞- .15⅛
tanks lb. .12⅞- —

Soybean oil acids, dbl. dist., dms., lb. .16¾- .19¼
tanks lb. .14¼- —
S. D., dms lb. .15½- .18
tanks lb. .13 - —

Sparteine sulfate, cns., 100 oz. or more oz. .80 - —

Spearmint leaves, dom., bls lb 75 - —

Spearmint oil, NF, dms. lb. 4.50 - —

Sperm oil, bleached winter, 45°, dms. lb. .1750- .1850
tanks lb. .1550- —
Nat., winter, 45°, dms. lb. .1650- .1750
tanks lb. .1450- —

Spermaceti wax, blocks, cs. lb. .32 - .33
Cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb 2.10 3.55
Squill, white, bls. lb. .16 .18
Powd., bbls., bxs. lb. .17 .20

St. John's bread, edible bls. lb. .17 - —

Stannic chloride, anhyd., dms., works lb. .874 - .896

Stannous oxide, dms., dlvd. lb. 1.668 - 1.818
Stannous chloride, anhyd., dms. lb. 1.129 - 1.442
Stannous sulfate, works lb. 1.197 - 1.517

Star root (see Helonias root).

Stargrass root (see Aletris root.)

Stavesacre seed, bgs. lb. .60 - .61

Stearic acid, dbl. pressed, bgs. lb. .17¼- .19¾
Single-pressed, bgs. lb. .16¾- .19¼
Triple-pressed, bgs. lb. .19 - .21½

Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York. gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —

Stramonium leaves, bgs. lb. .16½- .18

Streptomycin sulfate, bulk gram. .03 - —

Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 - —

Strontium carbonate, pure, dms., 5-ton lots or more, works.lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —

Strontium chromate, fib. dms., dlvd. lb. .48 - —

Strontium iodide, jars, 25-lb. lots lb. 3.57 - —

Strontium nitrate, bgs., c.l., works. 100 lbs.11.00 - —
bgs., l.c.l., works 100 lbs.12.00 - —

Strontium salicylate, NF, dms lb. 1.88 - —

Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton.56.70 -66.15

Strophanthin G (see Quabain, USP).

Strophanthin K, bots. oz.25.00 -25.50

Strophanthus seed, Kombi, biologically tested, bgs lb. 2.50 - 3.00

Styrax gum, USP cs. lb. 4.50 5.50

Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, frt. equald. lb. .13 - —
Tech., 99.2%, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, frt. equald lb. .11 - —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.

Styrolyl acetate, bots lb. 1.03 1.10

Succinic acid, purit., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75

Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —

Sucrose, refd. white, bgs. refy E. lb. .0940- —

Sucrose acetate, isobutyrate, 90%, dms., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —

Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs. l.c.l., works lb. 1.00 - —

Sugar (see Sucrose).

Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 - .65
80-lb ctns. spot lb. .65 - .75

Sulfabenzamide, dms. kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo 9.00 -10.10
Sulfacetamide, USP fib dms kilo. 6.61 6.83
Sulfacetamide-sodium USP, fib. dms kilo. 8.13 9.25

Sulfadiazine, USP, microcrystals, dms kilo.23.35 -24.45
USP, powd., dms. kilo.22.60 -23.70

Sulfadiazine-sodium, USP, dms kilo.24.80 -25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
Sulfamerazine, USP, microcrystals, dms kilo.23.50 - —

Sulfamerazine-sodium, USP, powd., dms kilo.24.80 25.90

Sulfamethazine USP XV, microcrystals, dms kilo.19.65 -20.75
USP XV, powd., dms. kilo.18.75 -19.85

Sulfamic acid, cryst. dms., c.l., t.l., works 100 lbs.16.00 - —
dms., l.c.l., t.l., works 100 lbs.17.50 18.50
Gran., dms., c.l., t.l., works. 100 lbs.14.75 - —
dms., l.c.l., t.l., works 100 lbs.16.25 -17.25

Sulfanilamide, NF, reg., 1,000 lb., fib. dms., frt. equald lb. 1.75 - —
NF, reg., smaller lots, fib. dms., frt. equald lb. 1.80 - —

Sulfanilamide quinoxaline, veterinary, dms kilo.16.28 - —

Sulfanilic acid, tech. dms. c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —

Sulfapyridine, USP XV, powd., bots., tins kilo.15.45 -16.55

Sulfapyridine-sodium, monohydrate, dms kilo.16.55 -17.65

Sulfathiazole, NF X, microcrystals, dms kilo. 6.25 6.90
NF X, powd. dms. kilo. 5.50 6.15

Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —

Sulfur, coml., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —

Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton.23.50 - —
export, f.o.b vessels, Gulf ports. long-ton.25.00 - —
US and Canada, t.o.b. vessels Gulf ports long-ton.25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower.

Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton.24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.

Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines 100 lbs. 6.25 - —
lump, bgs., mines 100 lbs. 4.95 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —

Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs. 2.45 - —
bbls. mines 100 lbs. 3.70 - —
98-100%, pashing through mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —

Sulfur, refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —

Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05½- —
ret. dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —

Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .13
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., dlvd lb. .33 - —

Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05½- —
dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —

Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton.18.60 - —

66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton.22.35 - —
98%, tanks, works, East ton.23.50 - —
99%, tanks, works, East ton.23.70 - —
100%, tanks, works, East ton.23.95 - —

Sulfuric acid, California works, tanks ton.26.65 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
Sulfuric acid, CP, NF, consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
8-pt. bots., extra, cs., c.l., works, frt. alld lb. .16¼- —
8-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¼

Sulfuric acid, fuming (oleum), 20%, tanks, works ton.25.00 - —
40%, tanks, works ton.29.00 - —
65%, tanks works ton.39.50 - —

Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93

Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.60 - —
bulk, f.o.b. vessel at Fla. unit-ton. 1.05 - —

Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns lb. 2.00 - 3.05

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2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —

Talc, dom., fibrous, grd., bgs., c.l., works, New York ton.28.00 - —
bgs., l.c.l. works ton.31.00 -36.00
99.5%, 325 mesh, bgs., c.l., works, New York..ton.31.00 - —
bgs., l.c.l. works ton.34.00 - —
99.95X, 400 mesh, micronized, bgs., c.l. works..ton.38.00 - —
625 mesh micronized, bgs., c.l., works ton.80.00 - —
Dom., ord., Calif., grd., bgs., c.l., works ton.34.00 -39.50
Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00
tanks, works lb. .02⅞- .03¼

Tall oil, crude, tanks, works lb. .03¼- .03½
Acid, refined dms., c.l., works..lb. .08¾- .10
tanks, works lb. .07½- .08¾

Dist., depending on grade, dms., c.l., works lb. .07¼- .08¾
tanks, works lb. .06 - .08¼

Tall oil fatty acids, less 2% rosin acid, dms., c.l., works..lb. .09¾- .11
tanks, works lb. .07¾- .09

2-6% rosin acid, dms., c.l., works. lb. .06½- .09
tanks, works lb. .06½- .07

Tallow, edible, tanks, dlvd. lb. .06¼- .06¾
Inedible, fancy, bleachable, tanks, lb. .05⅞- —
fancy, guaranteed, bulk, f.o.b. steamer..lb. .06⅝-Nom.
dms., f.a.s. lb. .07⅜-Nom.
tanks, dlvd. lb. .06¼- —
No. 1, dlvd. lb. .05½- —
Prime, tanks, dlvd. lb. .05¾- —
Special tanks, dlvd. lb. .05⅝- —
Sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms. lb. .13¾- .16¼
tanks lb. .11¼- —
Hydrogenated, dms. lb. .16 - .18½

Tallow oil, acidless, dms., c.l. lb. .14 - —
dms., l.c.l. lb. .16 - —
tanks lb. .12½- —

Tangerine oil, Florida, dms. lb. 4.75 - —

Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.75 - 5.00

Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.07
powd., bbls., 1,000-lb. lots....lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 1.99
Tech., dms lb. 1.05 - —

Tansy oil, dms. lb. 6.60 8.00

Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., frt. equald gal. .53½- —
basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms. c.l., same basis. gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —

Tar, coal (see Coaltar).

Tartar emetic (see Antimony potassium tartrate).

Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald lb. .41 - —
bgs., 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —

Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50

Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms lb. .53 - .56

Terpinyl propionate, dms. lb. 1.65 - 1.70

Testosterone, USP, bots. gram. No prices.

Testosterone propionate, USP, bots. gram. No prices.

Tetrachloroethane, dms., works lb. .14½- —

Tetrasodium pyrophosphate (see Sodium pyrophosphate).

Tetrachloroethylene, tech. (see Perchloroethylene).

Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23¼

Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms., l.c.l. dlvd. E lb. .61½- —

Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —

Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E lb. .55 - —
tanks, dlvd. E lb. .51 - —

Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —

Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —

Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —

Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, dlvd. E. of Denver lb. .25 - —
tanks, dlvd. W. of Denver lb. .26 - —

Tetrahydrophthalic anhydride dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., t.l., same basis lb. .41 - —

Tetrapotassium phosphate (see potassium phosphate).

Thallium metal, dlvd lb. 7.50 -10.00

Thallium sulfate, 99%, bots., dlvd. lb. 5.00 -10.00

Theobromine, NF, fib dms., 100-lbs., f.o.b., works lb. 4.10 - 4.15

Theobromine and sodium acetate, USP, fib. dms., 500-lbs. works lb. 6.45 - —

Theobromine, sodio-salicylate, NF, fib, dms., 500-lbs., works. lb. 3.80 • —
Theophylline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 • —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo.36.00 • —
USP, ampule grade, fib., dms., frt. alld kilo.38.00 • —
Thiamine mononitrate, USP, fib. dms., frt. alld kilo.36.00 • —
Thiocarbanilide, dms., ton lots lb. .74 • —
dms., less than ton lots lb. .76 • —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb 5.20 • —
Tungstated, PTMA, kgs., works lb 6.20 • —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis lb. 1.15 • —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 • —
Thiourea, tech, bgs. t.l. frt. alld. lb. .30 • —
bgs., ton lots, same basis lb. .32 • —
bgs., less than ton lots, same basis lb. .33 • —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb. 3.50 • —
dl-Threonine, dms., 25 kilos, works, kilo.115.00 • —
Thyme leaves French, triple sifted extra, bgs lb .37 • —
Spanish, extra, bgs lb. .12 • —
triple sifted, bgs lb. .25 • —
Spanish, bgs. lb .09 • —
Thyme oil, NF, red, cns., dms. lb. 3.25 - 3.60
NF, white, cns lb. 3.50 - 3.95
Tech., white, cns lb. .80 - 1.10
Thymol fib dms., 25-lbs., f.o.b. works lb 2.43 • —
Thymol iodide NF, dms., 100-lbs f.o.b. works lb 7.30 • —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.15 • —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride, anhyd.)
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd. lb. .26½- —
reg., bgs., c.l., dlvd. lb. .25½- —
bgs. l.c.l. dlvd. lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville Fla.ton.180.00 • —
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y. ton.205.00 • —
bgs. ton lots same basis ton.215.00 • —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide rutile, nonchalking, bgs., c.l., dlvd E lb. .27½- —
bgs. l.c.l. dlvd E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works lb. .09¾- —
50% Ti O_2, high-tinting, dms. c.l., lb. .14⅛- —
dms. l.c.l. lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 • —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .26 • —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld. E lb. .81 • —
Tobias acid, dms., l.c.l., l.t.l., 5,000 lbs.-19,999 lbs., same basis. lb. .81½- —
dms., l.c.l., l.t.l., less than 5,000 lbs., same basis lb. .84 • —
For west coast delivery add 2c. per lb.
d-a Tocopherols, NF, mixer conc., pure basis bots kilo.67.00 • —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo.122.00 • —
d-a-Tocopheryl acid succinate, cryst., bots kilo.109.00 • —
dl-a-Tocopherol, bots. kilo.99.00 • —
dl-a-Tocopheryl acetate, bots kilo.90.00 • —
25% dry, powd., bots kilo.22.50 - 24.00
33⅓ dry, powd., bots. kilo.30.00 - 31.50
o-Tolidine base dry, kgs., 100% basis lb. 1.55 • —
Paste, kgs., 100% basis lb. 1.50 • —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis lb. 1.50 • —
Tolu balsam, cns lb. 4.00 • —
Toluene, coaltar, indust., or nitration, tanks, dlvd. E. of Rockies gal. .25½- —
Petroleum, indust., tanks f.o.b., f.o.b., frt. equald gal. .25 • —
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 • —
dms., l.t.l., same basis lb. .63 • —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb .16 • —
1,000-lb. or more, same basis lb. .18 • —
less than 1,000-lb., same basis lb. .23 • —
tanks, same basis lb. .14 • —
Toluenesulfonic acid in 10-gal. dms. 2c. per lb more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 • —
dms. 125 lbs. to t.l. lb. 1.00 • —
m-Toluidine, dms. c.l., works, frt. alld lb. .83 • —
dms., c.l., same basis lb. .84 • —
tanks, same basis lb. .82 • —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 • —
dms., l.c.l., same basis lb. .28 • —
tanks, same basis lb. .26 • —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 • —
Cast, dms., frt. alld. lb. .45 • —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 • —
Light shades, kgs, works lb. 1.70 • —
2,4-Toiylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 • —
Tonka beans, Angostura, prime f.o.b., N.Y. lb. 1.35 - 1.50
Brazilian, Surinam, cs., same basis lb. 1.00 - 1.10
Totaquine, 100-oz. lots, cns. oz. .42 • —
Toxaphene, dms., c.l., t.l., works. lb. .22 • —
dms., l.c.l., t.l.l., works lb. .23 • —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .38 • —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., dlvd lb. .985 • —
dms., l.c.l., dlvd. lb. .985 • —
tanks, dlvd. lb. .96 • —

Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver, lb. .42¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 • —
Tributyl phosphate, dms., c.l., works, lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 • —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 • —
tanks, same basis lb. .65 • —
Tributyrin, dms. l.c.l., dlvd. lb. .69 • —
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b works lb. .52 • —
USP, 100-lb. dms., frt. equald lb. 1.25 • —
Trichlorobenzene, dms. c.l., frt. alld. E lb. .15 • —
dms., l.c.l., frt. alld. E. lb. .16 • —
tanks, frt. alld. E. lb 13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., l.c.l., dlvd lb. .16 • —
tanks, dlvd lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .12¼- —
dms., l.c.l., dlvd. lb. .14 • .14⅛
tanks, dlvd. lb. .11¼- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .63 • —
dms., l.c.l., same basis lb. .75 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., non-ret. dms., 1 dm., frt. equald kilo. 3.10 • —

Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks, dlvd. lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .35 • —
dms., l.c.l., dlvd. lb. .36 • —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .22½- —
dms., l.c.l., dlvd, E lb. .24 • —
tanks, dlvd. E lb. .20 • —
Triethanolamine, dms., c.l., dlvd. E. lb. .24¼- —
dms., l.c.l., same basis lb. .25 • —
tanks, same basis lb. .22 • —
Triethanolamine tauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., l.t.l., frt. alld. lb. .26½- —
tanks, frt. alld. lb. .24½- —
Triethylamine, dms., c.l., dlvd E. lb. .50 • —
dms., l.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .46¼- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver, lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40¼- —
dms., l.c.l., dlvd. lb. .42 • —
tanks, dlvd. lb. .38 • —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 • —

Triethylene glycol, dms., l.c.l., dlvd. E. lb. .22½- —
tanks, dlvd. E lb. .18½- —
HP, tanks, dlvd. E. lb. .20 • —
Triethylenetetramine, dms., c.l., dlvd. E lb. .48½- .49¼
dms., l.c.l., same basis lb. .50 • .50¼
tanks, same basis lb. .46 • —
Triisobutylene, tanks, dlvd. lb. .08 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd E lb. .20¾- —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 • .305
tanks, frt. equald, 100% basis, lb. .26 • —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35½- —
dms., l.c.l., frt. equald, 100% basis lb. .35¼- —
tanks, 100% basis, frt. equald lb. .26 • —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30¼- —
dms., l.c.l., l.t.l., same basis lb. .31¼- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 • —
dms., l.c.l., works lb. .51¼- —
Tripentaerythritol, bgs., c.l., t.l., dlvd. E lb. .24 • —
bgs., l.c.l., l.t.l., dlvd. E lb. .25 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41¼- —
bbls., l.c.l., frt. equald lb. .43¼- —
Triphenylguanidine, bbls., works lb. .90 • —

FOR A WIDE RANGE OF COATINGS AND COMPOSITIONS SPECIFY

TITANOX*-RA

This general purpose titanium dioxide is the ideal white pigment for many coatings and other compositions that require the outstanding optical properties of rutile TiO_2—the right combination of whiteness, brightness, opacity and color stability.

Modified to retard after-yellowing of organic coatings, TITANOX-RA is a fast dispersing, low-oil absorption pigment adaptable to all dispersion processes. Its uniformity of all properties promotes efficiency in production and high quality in the finished product. Among the products for which TITANOX-RA is particularly suitable are:

• White and tinted industrial enamels and metal decorating enamels and lacquers intended primarily for indoor use . . . because TITANOX-RA contributes to the optimum of all properties. TITANOX-RA is particularly suited to finishes that must have consistently high reflectance.

• Interior white and tinted architectural and household enamels . . . because the high opacity of TITANOX-RA provides high hiding power at low pigmentation . . . accompanied by high gloss, reduction of after-yellowing and uniformity of tinting strength and tone.

• Plastics . . . because generally TITANOX-RA efficiently brightens, opacifies and regulates translucency. However, at the low prime pigment volume of many compositions such as vinyl floor coverings, the new TITANOX-RA-40, developed especially for such use, may be preferred.

TITANOX-RA may well be the pigment that gives you greater value for your pigmentation dollar. To determine the adaptability of TITANOX-RA or other types of TITANOX to your products, we invite you to get in touch with our Technical Service Department for more complete details. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

*TITANOX is a registered trade mark of National Lead Company for titanium pigments offered by Titanium Pigment Corporation.

®TITANOX
the brightest name in pigments

TITANIUM PIGMENT CORPORATION
Subsidiary of NATIONAL LEAD COMPANY

Tripropylene—Xylene

Tripropylene dms., c.l., divd. E gal. .44 • —
dms., l.c.l., same basis gal. .54 • —
tanks, same basis gal. .28 • —
Tripropylene glycol dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., l.c.l. t.t.l. frt. alld. E lb. .22 • —
tankcars and compartmented tankcars, frt alld E lb. .17½- —
tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 • —
Tripropylene glycol prices 1c per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Trypophane, dms., 1 kilo, works kilo 154.00 • —
Tung oil, dms., New York lb. .29½- .29¾
tanks, imported lb. .28 - .28¼
tanks, domestic, mills lb. .28 Nom.
Tungsten metal powd., 2.0-2.8 microns, dms., works lb. 4.25 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls, works lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .50
Tuscan red bbls, frt equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .50 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .33½- .38
Jobbing types, dry, bbls., same basis lb. .18 - .19
Regular types, dry bbls., same basis lb. .25 - .40½
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼- —
Raw, American, bgs, works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid 55-gal dms., f.o.b. works lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N indust. bgs., c.l., t.l., f.o.b. plant ton.100.00 • —
Urea, feed grade, c.l., t.l., f.o.b. plant ton.95.00 • —
45% N, agricultural, bgs., c.l. f.o.b. plant ton.92.50 • —
Bulk, c.l., t.l., same basis ton.86.50 • —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt equald ton.120.00 • —
37 grade, tanks, same basis ton.145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .68 • —
dms., l.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls lb. .12 • —

V

Valerian root, Belgian bgs. lb. .32 • —
Indian, bgs. lb. .25 • —
dl-Valine, dms., 1 kilo, works kilo.37.00 • —
Vanadium pentoxide, tech., dms., works lb. 1.38 • —
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 7.00 - 7.15
Mexican cuts, tins lb. 7.10 - 7.40
whole, tins lb. 7.40 - 7.80
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 • —
less than 2,000 lbs lb. 3.20 - 3.30
Venetian red, jobbing, bgs., works, lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 • —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns lb. 17.00 -17.25
Haitian, cns. lb. 12.00 -14.00
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c. higher W of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal dms., l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .80 • —
Vinyl chloride monomer, tanks, works, min. frt. equald. E. lb. .0750- —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether, tech., dms., c.l., works lb. .30¼- —
dms., l.c.l., works lb. .31 • —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms., c.l., divd lb. .49 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½- —
dms., l.c.l., same basis lb. .18½- —
Vinyltoluene, tanks, same basis lb. .14 • —
Zone 2 prices are 1c. per lb. higher. Zone 1 is East of Rockies. Zone 2 is West of Rockies.
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 • —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07½- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 • —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tins gram.45.00 • —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .87 • —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. .87 • —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.52.00 • —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 • —
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 • —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 • —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin, 500-gram bots, 1-5 kilo dms., frt. alld gram. .57 • —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo, dms., frt. alld gram. .87 • —
Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 • —
850,000 units per gram less than kilo lots kilo.45.00 • —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 • —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb. 2.10 • —
Warfarin, 0.5%, dms., 50-lb. lots, divd lb. 1.95 • —
dms., 25-49-lb. lots, New York or Chicago lb. 2.08 • —
dms., 5-24-lb lots, New York or Chicago lb. 2.15 • —
Watchung-type reds., bbls lb. 1.95 • —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal.12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb .21 • .23
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb 8.50 • —
Whiting (see Calcium carbonate)
Wild cherry bark, thin, nat., bls lb. .22 • —
Wintergreen oil, USP nat. northern, cns lb. 6.35 -17.50
USP, nat. southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch Hazel bark, bls lb. .26 • —
Witch hazel leaves, bls lb. .35 • —
Wollastonite fine paint grade, bgs., c.l., works ton.41.00 • —
bgs., l.c.l., ex whse ton.51.00 • —
medium paint grade, bgs., c.l., works ton.28.00 • —
bgs., l.c.l., ex whse ton.39.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 • —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns lb. 4.75 • —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .29 • —
Birmingham dist. gal. .29 • —
Chicago dist. gal. .28½- —
Cleveland dist. gal. .29 • —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .29 • —
Lackawanna, N.Y. gal. .29½- —
Lone Star, Tex. gal. .27 • —
Lorain, Ohio gal. .29 • —
Middletown, Ohio gal. .30 • —
Minnequa, Col. gal. .29 • —
Philadelphia dist. gal. .29 • —
Pittsburgh dist. gal. .29 • —
Sparrows Point, Md. gal. .29 • —
Terre Haute, Ind. gal .29 • —
Youngstown, Ohio gal. .29 • —

—Continued on page 61

Get the properties you want most in your formulations with . . .

AZO lead-free ZINC OXIDES

the paint industry's most versatile line

GRADE (Lead-free)	BULK DENSITY lbs./cu. ft.		PARTICLE SHAPE	PARTICLE SIZE	OIL ABSORPTION (Rub Out Method)	FOR PAINT CONSISTENCY (Rated High to Low)
	Conventional	AZODOX*				
AZO-22	20	35	Acicular	Long	21	5
AZO-11	23	40	Acicular	Medium	18	4
AZO-33	27	46	Acicular	Short	16	3
AZO-55	32	60	Nodular	Small	14	2
AZO-55-LO	36	65	Nodular	Medium	12	1
AZO-66 (French)	28	—	Nodular	Fine	12	–
AZO-77 (French)	24	—	Nodular	Fine	12	–

No need to compromise on the properties you want in your paint and enamel formulations. Set your specifications—then from the complete AZO line of lead-free zinc oxides choose the particular grade to meet your exact requirements. American Zinc is the only producer of acicular lead-free zinc oxides covering the full range of oil absorptions from high to low—including the intermediate ranges—in both conventional and Azodox forms.

In your formulations, AZO lead-free zinc oxides increase hiding power, film strength and tint retention . . . control chalking, inhibit mildew growth. Controlled refining of AZO zinc oxides removes objectionable fine particles, increases brightness and insures uniform consistency. WRITE FOR COMPLETE INFORMATION.

*AZODOX is American Zinc's de-aerated form of zinc oxide, with high apparent density. All other physical properties remain unchanged. Faster handling, less storage space, quicker mixing.

American Zinc also produces a wide line of leaded zinc oxides for general use in exterior house paints.

American Zinc sales co.

1515 Paul Brown Building • St. Louis 1, Missouri

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Volume 180 July 24, 1961 No. 4

Slants on the Economy

The experts are hunting and guessing all over the lot in an endeavor to learn just what is the status of the national commercial economy, whither it is headed, and how and when it is going to get—where. They are trying to find out what will be the response to and the effects of President Kennedy's declaration that the economy must—at least should—expand at an annual rate of 45 percent in order to keep the United States ahead of the Soviets. They are asking how that expansion must be and can be allocated among the various areas of economic operations and in what order among their several levels. They are trying to figure out what should be the respective roles of government at its various levels and of private capital in the initiation and the promotion of the necessary expansion.

Those are but some of the slants along which the economy is being assayed. Particular attention is being given to the information that US industrial production at the end of the first half of the current year was at the highest value rate in history—and what was its quantitative status—in the face of a prediction that its value would go almost 5 percent higher by the end of the year.

That prediction is based on expectations that consumer spending will get out of the lag that was reportedly worrying federal officialdom about a fortnight ago. It has got some support from reports—perhaps from another slant—by the Survey Research Center at the University of Michigan that consumers were getting rid of their fear of inflation and were getting into a buying mood.

Two views on how to promote that mood have been expressed. Private enterprise has declared that merchandising at the retail level can and will provide the answer by way of better sales-promoting and selling, with special emphasis on the promoting end. A US Senator from New York—evidently a believer in the modern economic tenet, let government do it or get government to do it—has urged that the Secretary of Commerce initiate a campaign to "encourage" merchants to cut prices. He did not say how that "encouraging" should, or could, be done with any expectation of success. Aside from the doubtfulness of acceptance of such a plan by either the Commerce chief or any merchant, the better-selling method has the distinct advantage of being much closer in keeping with the profit status of retailing today.

Industry and Education

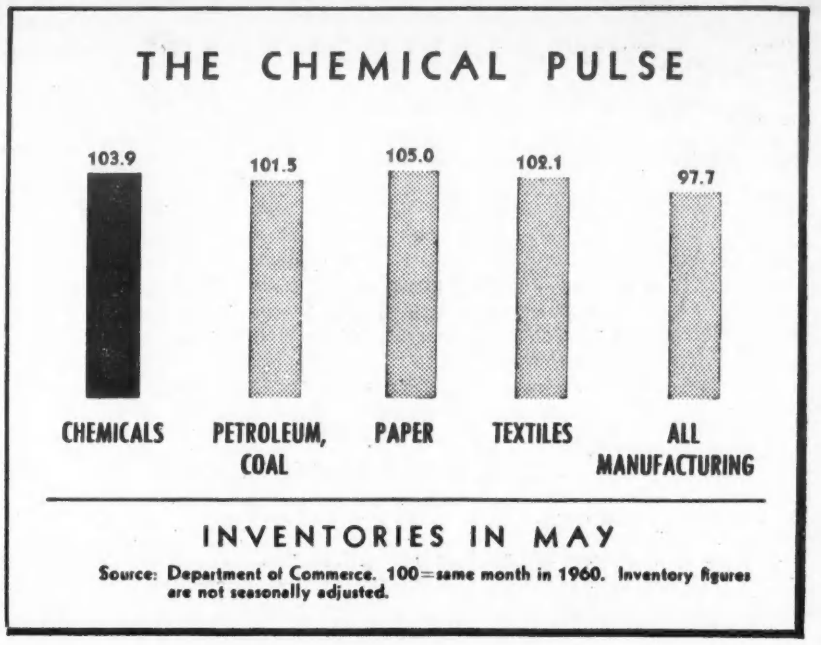
What was said in OPD last week, beginning on page 7, with reference to the role of the chemical industry as the school teacher's friend, as performed by the Manufacturing Chemists' Association, should be the seeding of an incentive for broader and deeper participation in that area of public service by every branch of industry and business as a whole at all levels from local to national.

Naturally, the MCA program has largely to do with education in subjects contributive to the acquisition of practical acquaintance with and experience in some of the many areas of applied chemistry. For that reason, it may be regarded by general educators as neglectful of the importance and necessity of social studies essential to the adequate development of interest in and respect for human relations.

One of the most perplexing problems in the constructing of educational programs has to do with the getting of due recognition and acceptance of the necessity for improvement of juvenile behaviour, the remedial combatting of delinquency trends.

All sectors of business at local levels can do much to prevent such outdropping if they will make use of the plan recently initiated in Chicago and New York, with assistance from the Ford Foundation, under which potential drop-outs are given split-time jobs and accelerated high-school studies. The idea of acceleration is being applied also at collegiate levels. A continuous twelve-month academic year was inaugurated at Antioch College in the first week of July; the State University of New York announced about a week later that it would soon start a three-term twelve-month schedule, under which a student could get a degree in two years and eight months.

The foundation stone of any industrial plan in education should be practical knowledge of what is needed in the service of the public. One of the biggest needs of today is for medical doctors and trained technical and scientific specialists in all other health-s rvice activities. Industrial interest in the meeting of that need should start with the study of possibilities for the selection of basically qualified candidates for eventual entrance into such educational courses under the gradually evolving plan which marks the progress of a public school student in terms of individual capability rather than by grades and classes. It can provide teachers with assistance toward getting students interested in special studies prerequisite to the higher training courses.



Meetings

American Association of Textile Chemists & Colorists, national convention, Statler hotel, Buffalo, N. Y., September 27-29.

American Chemical Society, national meeting, Chicago, September 3-8.

American Coke & Coal Chemicals Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., October 23-24.

American Institute of Chemical Engineers, national meeting, Lake Placid Club, Lake Placid, N. Y., September 24-27.

American Oil Chemists' Society, fall meeting, Pick-Congress hotel, Chicago, October 30-November 1.

American Petroleum Institute, annual meeting, Palmer House and Conrad Hilton and Congress hotels, Chicago, November 13-15.

Armed Forces Chemical Association, annual meeting, Statler-Hilton hotel, Washington, D. C., September 13-15.

Canadian Agricultural Chemicals Association, annual meeting and conference, Mont Tremblant Lodge, Mont Tremblant, Quebec, September 18-20.

Canadian Manufacturers of Chemical Specialties Association, annual meeting and conference, Royal York hotel, Toronto, Ont., October 30-November 1.

Chemical Industries Exposition, Coliseum, New York, November 27-December 1.

Chemical Market Research Association, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 11-12; Mark Hopkins hotel, San Francisco, November 28-December 1.

Commercial Chemical Development Association, fall meeting, Palmer House, Chicago, October 18-19.

Drug;Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, D. C., November 2-4.

Gordon Research Conferences, corrosion-oxidation of metal surfaces, Colby Junior College, New London, N. H.; organic reactions and processes, New Hampton School, New Hampton, N. H.; chemistry at interfaces, Kimball Union Academy, Meriden, N. H.; biochemistry and agriculture, Tilton School, Tilton, N. H., July 24-28.

National Agricultural Chemicals Association, annual meeting, The Homestead, Hot Springs, Va., October 29-November 1.

National Chemical Exposition, sponsored by the Chicago section of the American Chemical Society, International Amphitheater, Chicago, September 5-8.

National Paint, Varnish & Lacquer Association, annual meeting, Statler-Hilton hotel, Washington, D. C., October 30-November 1.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 11-12.

Society of the Plastics Industry, annual New England Section conference, Wentworth - by - the - Sea, Portsmouth, N. H., October 12-13.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, September 12.

Washington Talks It Over

Chemical Industry Dollar-a-Year Men, Assigned to 6-Month Duty Tours in the Commerce Dep't, May Soon Be Disappearing From the Washington Scene and Politics May Be Last Straw.

By Ralph L. Cherry
Washington Editor

The chemical industry's contribution to the national defense mobilization effort of assigning qualified executives to Washington for six-month tours of duty in the Commerce Department may be nearing an end.

It may go on for another year, but whether it continues beyond that time depends upon developing circumstances.

s demise, if it should come, has nothing to do with the recent break in relations between the Business Advisory Council—now the Business Council—and Secretary Hodges.

Rather, it is the result of an accumulation of things, the latest of which is to put a political tinge to the appointments that the chemical industry feels to be entirely unnecessary and unwarranted.

It is not enough that so-called WOC's, as these people working in the department without compensation are called, must get security clearance from the FBI and bare their financial status to the public before they can take on their assignments.

Now they must get political clearance from their senators also. The latest appointee for the chemical industry, William C. Douce, of Phillips Chemical Company, made this discovery when he ran into a ten-day delay in getting into office earlier this month.

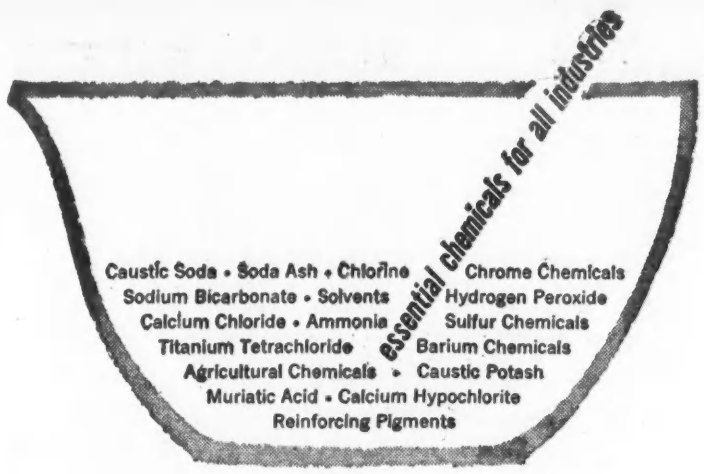
Why the administration should attach any political importance to these jobs is something no one can understand. They certainly cannot be considered patronage plums, since the compensation amounts to only a one-dollar bill personally autographed by the Secretary of Treasury, a certificate of thanks suitable for framing and a flag that once flew over the Capitol.

But such is the way Washington sometimes operates. And in this particular area it is beginning to wear the patience of the chemical industry a bit thin.

The WOC program dates back to the Korean emergency days. Everyone agreed at the time that it was a good idea to have people in charge of the materials side of the defense program who knew the day-to-day problems of industry to handle the many questions that arise in a period of emergency and mobilization.

This didn't last long, however. Soon after the Korean settlement, even though mobilization planning was still important, congressmen begin sniping at the WOC's.

Through investigations and restrictive laws, they eventually succeeded in taking away all their authority to make decisions and WOC's now serve as little more than advisors to the division head.



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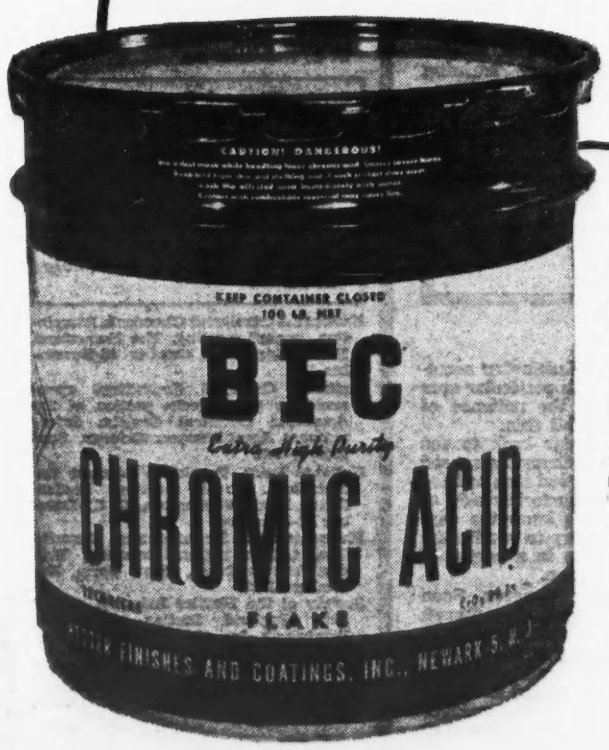

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Heavy Chemicals

Sodium Borohydride, Gov't Cast-Off, Is Primed for Big Commercial Role

Skeptics are now confronted with three items of evidence that something big is brewing for sodium borohydride, a casualty of the government's defunct borane fuels program. First there was the news that a major German company had perfected a low-cost production process and was planning to export the material—possibly here. This would hardly make sense, observers noted, unless world consumption, currently running at about 25,000 pounds a year, was destined to move into the six- or seven-figure class. Then one of the two US producers said it had acquired a second facility and would start it up late this year. This was followed by a round of price cuts, ranging 50 to 60 percent, initiated apparently by the same producer.

Says a spokesman for the company: At the former prices, an active customer was one taking from 1,000 to 2,000 pounds a year; at the new schedule, the company expects to attract customers in the 5,000-to-10,000-pound bracket.

If this means a short range goal of expanding the market to five times its present size, it would still be just a start when measured against the company's affirmed capacity of 2.5 million pounds (one trade estimate has it as high as 4 million pounds), plus whatever the German firm will have on tap, plus that of the domestic competitor.

One factor to be considered is this US company's patent claims. Covered by its use patents are all domestic applications, according to the spokesman. He notes that pricing includes automatic licensing, and that the patents preclude any unlicensed domestic competition. The German company will recognize these patents, he declares.

The area the company would like to open up right now comprises fine chemical applications. More particularly, the interest is in ester reduction, aldehyde reduction and nitriles.

At the right price, borohydride is said to have a future here because it saves the user the expense of capital outlay for the high-pressure and high-temperature equipment involved in conventional reduction methods based on hydrogen and a catalyst.

In addition to capital savings, borohydride reportedly gives a higher product yield with no destruction of double bonds and no side reactions.

Emphasis then would be switched from pharmaceutical outlets to larger volume chemical markets. Beyond that looms the pulp and paper industry as the only customer that could propel sodium borohydride consumption beyond a million pounds a year.

Right now skepticism rules, but a few more rounds of price cuts like last fortnight's and paper and pulp market might emerge as a real possibility.

What makes the whole situation intriguing is the fact that the US producer has been importing substantial quantities of sodium borohydride from Germany—for example, 4,000 pounds during a single week in July. According to OPD's records, such imports have totaled 10,000 pounds to date in 1961.

Do the German company's process and the American firm's use patents add up to a cooperative rather than competitive effort here? The trade is watching.

Meanwhile, a spokesman for the second U.S. company, whose last imports from Germany arrived in December of 1960, says that its prices were already competitive with the reduced levels posted last fortnight.

He says the company has been studying the various use patents, has no definitive comment on them, and is continuing to offer its technical grade of sodium borohydride for customer evaluation.

Though unconvinced that a volume market is on tap, he expects the company to be competitively in the swim with whatever market evolves.

Price Trends

Advanced
None

Reduced
Tin metal (Straits), 2c per lb.
Salts, ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	July 22, 1960
106.85	106.85	106.81	106.88

For Current Prices See Page 11

Paper Production Higher

The American Paper & Pulp Association reported paper production for the week ended July 15 at 83.0 percent of theoretical capacity, as compared with the revised figure of 54.8 percent for the previous week and 83.6 percent for the corresponding week of last year.

Acids

Boric—Material is starting to move again as plants prepare to reopen following vacation shutdowns. Bulk prices remain unchanged from levels set in June 1959, and the outlook is for steadiness during the balance of the year.

Housing and automobiles are still expected by most observers to spur the economy into vigorous action during the fourth quarter. Borax and boric acid should be numbered among the beneficiaries, and the trade is looking forward to an upturn sharp enough to offset the doldrums experienced in the January-March quarter.

Hydrochloric—Here in the east, steel, with its doldrums, remains a thorn in the market's side. Elsewhere, chlorinated solvents, food processing and miscellaneous outlets tell a more cheerful story. Similarly, eastern prices continue characteristically soft, though firmly pegged farther west.

Hydrofluoric—AEC continues absorbing substantial material for uranium compound manufacture, while seasonally normal demand emanates from alkylation and stainless steel accounts. Meanwhile, a new HF plant, with 11,000 tons of producing potential, is moving to the starting line in northern Jersey. Start-up is expected in September.

Nitric—The fertilizer season is over. Industrial demand remains to absorb desultory scraps of material, sources close to the market say. Prices have been long unchanged.

Sulfuric—Steel outlook brightened with higher production during the week ended July 15. Production totaled 1,860,000 net tons, up sharply from the previous week's 1,779,000 tons, arresting a month-long downtrend.

Steel output for the year to date stands at 48,710,000 tons, about 23 percent less than the 63,065,000 tons turned out during the comparable period last year.

Bases and Salts

Copper Sulfate—Production of copper sulfate in May totaled 4,900 tons, down a seasonal 5 percent from April, according to Mines Bureau data. Shipments rose 7 percent, and stocks fell 2 percent, closing at a level sufficient for one month's needs at the May rate of shipments.

Exports totaled 615 tons in May, while Imports were only 40 tons, all arriving from Belgium-Luxembourg.

Soda Ash—Glass manufacture for the beverage trade has been absorbing seasonable quantities of ash. Prices continue at levels of several years standing, with no indications of an upward push. One producer feels that unless prices

Heavy Chemicals

can be raised, the east coast will one day face a shortage of soda ash because at current levels it is becoming uneconomical to produce the material.

ing 95,944 short tons as compared with 80,105 in April, the Mines Bureau reports. Chromite used in metallurgical products gained 11 percent, while refractor uses rose 11 percent and chemicals 18 percent.

The chemical industry consumed 14,241 tons of chromite in producing 10,207 tons of chemicals, Mines notes. Stocks of chemicals at producers' plants at month's end totaled 9,635 tons, down sharply from 12,774 the month before.

Tin—Market eased somewhat as listings dipped 2 cents to close on Friday at $1.15 a pound, spot.

Heavy Chemical Briefs

AEC AWARDS CONTRACTS: In May, Atomic Energy Commission awarded contracts of $224,000 to General Chemical Division of Allied Chemical Corporation for aluminum nitrate monohydrate; $42,210 to Mallinckrodt Chemical Works for ferrous sulfamate, and $26,000 to Celanese Corporation of America for a phosphate ester fluid.

BDSA PEGS HF IN '61: Despite low production in early 1961, total hydrofluoric acid output, excluding production by primary aluminum makers, should hit 120,000 tons this year. So reports Business & Defense Services Administration in its monthly, *Chemical and Rubber.*

GOV'T BAUXITE OFFERED: General Services Administration is making about twenty-four short tons of bauxite furnace residues available for sale to commercial buyers. The material is presently stored at Seneca Ordnance Depot, Romulus, N.Y. Bidders should contact the director of the project administration division of GSA'S Defense Materials Service in Washington.

Yugoslav Sulfuric Unit Ready to Come on Stream

With start-up of a new 55,000-ton-a-year copper smelter at Bor, Yugoslavia is now ready to bring on stream two related facilities: 230,000-ton-a-year sulfuric acid unit at the same site, and a 570,000-ton superphosphate plant at nearby Prahovo.

A current five-year plan calls for increasing capacity at the copper smelter to 80,000 tons annually by 1965.

Witcoff Testimony Clarified

In its hazardous labeling story last week, OPD erroneously reported that Dr. Harold Witcoff, director of chemical research for General Mills, Inc., objected to the inclusion of epoxy resins among a group of substances to be labeled as "strong sensitizers." Dr. Witcoff's objections related to polyamide resins, which are used as epoxy resin curing agents, rather than to epoxies themselves.

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Alkaline & alkaline earth materials, such as sodium, potassium, cesium, lithium, magnesium, calcium, aluminum	Carbon dioxide, carbon tetrachloride and other chlorinated hydrocarbons. (Also refrain from using water and dry chemicals on fires with these materials.)
Acetic Acid	Chromic acid, nitric acid, hydroxyl containing compounds, ethylene glycol, perchloric acid, peroxides & permanganates
Acetone	Conc. sulphuric & nitric acid mixture
Acetylene	Florine, bromine, chlorine, copper, silver, mercury and their compounds
Ammonia, Anhydrous	Mercury, halogen, calcium hypochlorite, hydrogen fluoride
Ammonium Nitrate	Acids, metal powders, flammable fluids, chlorates, nitrates, sulphur & finely divided organics or combustibles
Aniline	Nitric acid, hydrogen peroxide
Bromine	Ammonia, acetylene, butadiene, butane & other petrol gases, hydrogen, sodium carbide, turpentine, benzine & finely divided metals
Calcium Carbide	Water (see Acetylene)
Carbon, Activated	Calcium hypochlorite
Copper	Acetylene, hydrogen peroxide
Chlorates	Ammonium salts, acids, metal powders, sulphur, finely divided organics or combustibles, carbon
Chromic Acid	Acetic acid, naphthalene, camphor, alcohol, glycerine, turpentine, & other flammable liquids
Chlorine	Ammonia, acetylene, butadiene, benzene & other petroleum fractions, hydrogen, sodium carbide, turpentine & finely divided powdered metals
Chlorine Dioxide	Ammonia, methane, phosphine, hydrogen sulphide

DO NOT contact these . . .	with these
Cumene Hydroperoxide	Acids (organic & mineral)
Fluorine	Isolate from everything
Hydrocyanic Acid	Nitric & other acids, alkalies
Potassium & Sodium Cyanides	Acids, alkalies
Hydrogen Peroxide	Copper, chromium, iron, most metals or their respective salts, flammable fluids & other combustible materials, aniline & nitromethane
Hydrofluoric Acid, anhydrous (Hydrogen Fluoride)	Ammonia, aqueous or anhydrous
Hydrogen Sulphide	Nitric acid, oxidizing gases
Hydrocarbons, general	Fluorine, chlorine, bromine, chromic acid, sodium peroxide
Iodine	Acetylene, ammonia, hydrogen
Mercury	Acetylene, fulminic acid, hydrogen
Nitric Acid, conc.	Acetic, chromic & hydrocyanic acids, aniline, carbon, hydrogen sulphide, flammable media, fluids or gases and nitritable substances, i.e. glycerine
Oxygen	Oils, grease, hydrogen, flammable fluids, solids and gases
Oxalic Acid	Silver, mercury
Perchloric Acid	Acetic anhydride, bismuth & its alloys, alcohol, paper & wood
Phosphorous & some Compounds thereof	Air, oxygen
Potassium Chlorate	Acids
Potassium Permanganate	Glycerine, ethylene glycol, benzaldehyde, sulphuric acid
Sodium Nitrate	Ammonium nitrate & other ammonium salts
Sodium Peroxide	Any oxidizable substances, as for instances methanol, glacial acetic acid, acetic anhydride, benzaldehyde, carbon disulphide, glycerine, ethylene glycol, ethyl acetate, furfural, etc.
Sulphuric Acid	Chlorates, perchlorates, permanganates

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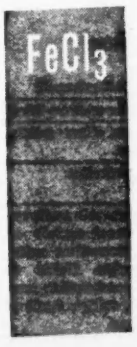

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OPD Reports From Europe

Soviet Banks on West for Help on Goal

—Continued from page 6

fiber producing plants with expansion and modernization of existing fiber factories.

Soviet farm problems are putting emphasis on fertilizers and plant protection chemicals of all types. Mr. Bibishev notes that output of weed killers will be 350 percent greater this year than in 1958.

A recurrent theme throughout the seven-year plan is obsession with US economic standards and rates of growth. Mr. Bibishev says that the seven-year plastics targets represent "a rate of growth it took the US fifteen or sixteen years to achieve."

It is uncertain whether he means the rate of growth of the total 1.8 million tons of polymers to be produced in 1965.

Overall Aim to Overtake US

More generally, Navel Ivanov, deputy chairman of the State Planning Committee usually called Gosplan, says "our aim today is to overtake the US in per capita output during the present decade."

Mr. Ivanov says calculations by Gosplan's economists show that by 1965 "the Soviet Union will outstrip the US in the total volume of production and approximately by 1970 in per capita production as well."

These achievement forecasts clearly are dependent on the Soviet estimates of what the US economy will do in this decade.

Mr. Bibishev emphasizes that the chemical growth at least will be based on Western processes and equipment to the maximum extent. He notes agreements with the Krupp, Farbenfabriken Bayer AG, Badische Anilin & Soda Fabrik and H. J. Zimmer firms in Germany and Chatillon and Montecatini in Italy.

The German agreements have been mostly fiber and polymers, while the Italian contracts include nylon tire cord and titanium dioxide.

Interestingly, writing in a British publication, he makes no mention of chemical plant agreements with UK companies.

Southern Nitrogen Borrows $5 Million for Expansion

Southern Nitrogen Company has completed arrangements for a $5 million loan from Mutual Life Insurance Company of New York to finance additional production and storage facilities at Savannah, Ga., Tampa, Fla., and locations to be selected in North Carolina.

The loan will be secured by 6 percent first mortgage bonds, due April 1, 1976. Sinking fund payments will begin in 1971. Southern Nitrogen will issue to Mutual Life warrants to buy 37,500 shares of common stock of the company at $20 per share. The warrants expire October 1, 1971.

The principal additional facilities will be constructed at Savannah to increase Southern Nitrogen's production of anhydrous ammonia there by 50 per cent—from 100,000 tons to 150,000 tons a year (OPD, 7/3/60).

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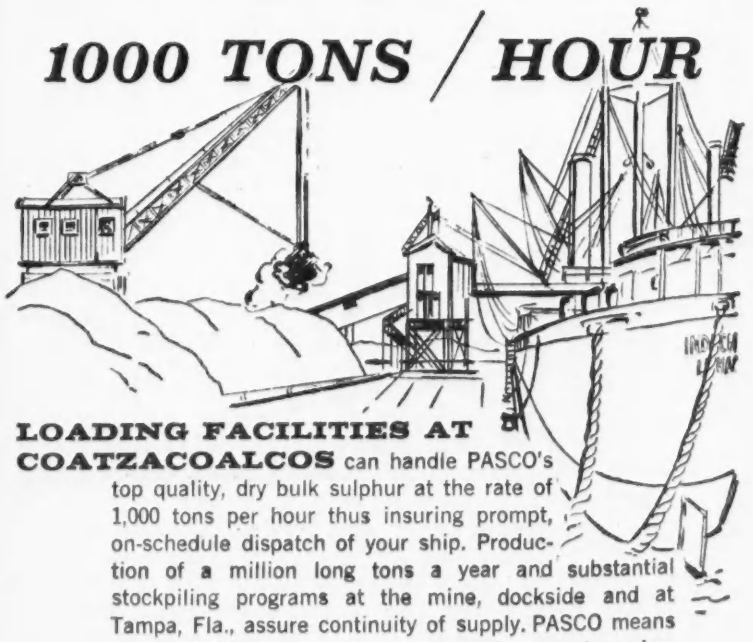

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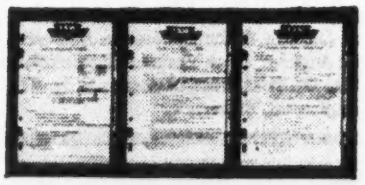

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Chemicals Support Aim Of Pollution Control Law

The chemical industry last week pledged its continued cooperation with federal and local governments in the expanded water pollution control program just signed into law by President Kennedy.

John E. Hull, president of Manufacturing Chemists Association, said that the chemical industry, which last year alone spent more than $100 million on water pollution control and which has sponsored long range pollution projects through the MCA, is gratified that the new legislation supports state and interstate programs with which the industry has worked effectively in the past.

"As our society has become more complex, by-products of our striving for a higher standard of living sometimes create problems requiring a balance of benefits versus risks," he said. "The new water pollution abatement law recognizes the need for such a balance and the chemical industry pledges its continued cooperation with federal, state, local and interstate agencies to the end that the aim of the law will be achieved."

Nofsinger Named Chairman

C. W. Nofsinger has been elected vice-chairman of the board of directors of Western Petrochemical Corporation. Mr. Nofsinger is president of the C. W. Nofsinger Company, engineers and contractors, Kansas City, Mo. Prior to formation of that company in 1956 he was with M. W. Kellogg Company. Previously he had served with the Petroleum Administration.

Phosphate Underwater Plan

—*Continued from page 3*

development along the west coast on federal lands.

At least one company—Collier Carbon & Chemical Corporation of Brea, Calif.—has expressed an interest in going after the submerged phosphorite (pebble phosphate) deposit.

Collier would vacuum clean the ocean floor in some 600 feet of water about forty miles off the coast between Santiago and San Clemente Island.

In a technical sense, Mr. Udall has issued a notice for industry "nominations" of 5,760-acre leasing blocks it would like to have put up for auction bidding.

Nominations may be made until September 15, using block numbers obtainable from a map of the area available from the Bureau of Land Management.

After all nominations are in and the areas are selected for leasing, competitive bids will be received on a date to be fixed by the bureau.

The competition will revolve around the bonus to be offered for permits to develop the areas. The notice fixes the minimum bonus at $5 an acre.

The term of the lease probably will run for ten years, or as long as phosphate is being produced, with rentals of 50 cents an acre for the first and second years and $1 per acre for each year thereafter.

Chemical Efforts

—*Continued from page 1*

inition is yet to be hammered out. Also, some confusion exists as to how the credit is to be applied in the case of small companies.

It is the intention of the committee to give small companies a better tax break, but this is not spelled out clearly in the legislation.

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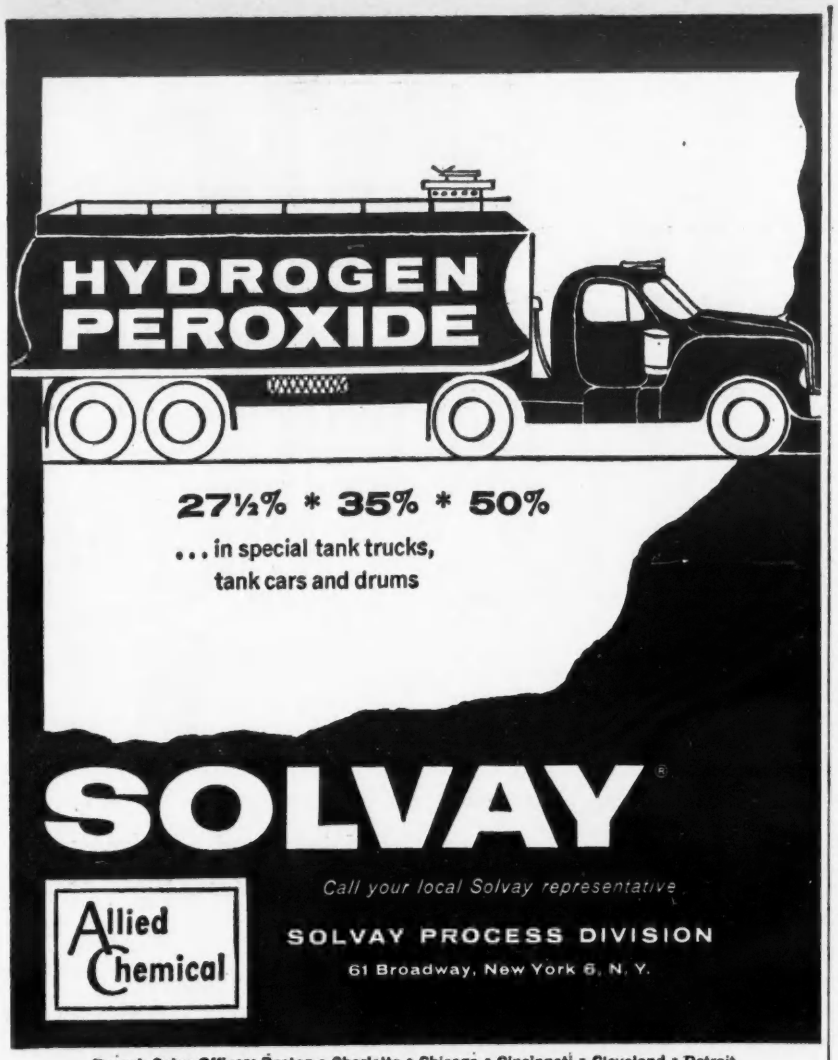

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GSA Makes Tin Offering To Ease Market Shortage

With tin still scarce in world markets, General Services Administration has come through with an offer to sell 500 long tons of pig tin formerly held by the Federal Facilities Corporation.

This tin is not in either of the government's two regular stockpiles, and has been declared excess to national needs. GSA describes it as the "longhorn" brand of pig tin. It was refined in Texas and has been stored at Wardwell, Ohio, close to steel producing areas.

The tin will be offered for sale in fifty lots of ten tons each, consisting of forty lots of Grade A, five lots of Grade B and five lots of Grade C.

The sale will be made by sealed bidding (telegraphic bids accepted). Copies of the invitation for bids may be obtained from, and any inquiries concerning the offering may be addressed to, the chief, industry branch, project administration division, defense materials service, General Services Administration, Washington 25, D.C.

DuPont Cuts Neoprene

E. I. duPont de Nemours & Co. is reducing prices of two types of neoprene 2 cents per pound on August 1. Neoprene "WHV" will be reduced to 37 cents, and neoprene latex "842-A" to 85 cents, in 8,000-gallon tankcars, f.o.b., Louisville, Ky. Smaller quantities, ex-warehouse, will also be reduced 2 cents.

Dutch Fertilizer Plant

—*Continued from page 4*

pany, also intends to put up a new fertilizer facility in the natural gas area.

Negotiations are said to be aimed at trying to find a way of combining the two projects in a four-company joint venture.

At the same time, Nederlandse Aardolie Mij, a fifty-fifty venture of Shell and Standard Oil Company (New Jersey), has officially asked for permission to exploit the northern Dutch gas reserves.

The field has been conservatively estimated to have 2 billion cubic feet of natural gas.

Narcotic Drug Labels

—*Continued from page 7*

capsule, etc., in case of dosage units; milligrams per stated unit of the product (ounce, gram, cc, mil., etc.) in case of a mixture, compound or preparation, or grams per package in the case of a straight narcotic alkaloid or salt.

The bureau notes that the trade and professions are gradually shifting from the old ounce and grain system and measurements to the metric system. The bureau prefers the metric system and now requires all its narcotic drug accounting to be made on the metric basis.

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Petroleum Derivatives

Benzene price is now 31 cents a gallon. Effective July 18 a major coke oven producer posted a 3-cents-a-gallon price cut. Other suppliers, both coke oven and petroleum, became competitive immediately. Just what spurred the reduction was not exactly clear at first. That benzene was headed for a price cut was inevitable. Trade opinion has held for some time that burgeoning petroleum benzene capacity would eventually force prices down. But that the cut would come with such suddeness was not expected. Most trade sources believed January 1962 would see a lower price quotation. Observers were correct in pegging the reduction at 3 cents gallon, however.

What then triggered the price cut six months prior to expectations?

Reliable sources offer the following explanation.

A major benzene consumer, long a customer of the coke oven source who eventually cut the price, was offered 32-cent benzene by a major petroleum supplier around the beginning of July.

Getting wind of the situation, the coke oven supplier seized the initiative and promptly went down to 31 cents in order to retain its market position.

Buyers of Texas crude oil have requested continuance of the eight-day producing schedule in August for that state's prorated wells.

Actual request made to the Texas Railroad Commission was for 2,435,671 b.p.d. output, an increase of 18,247 b.p.d. from July requests.

Decision by the regulatory agency was to be handed down after a meeting July 20, but by press time Friday no announcement had been made.

Down in April went prices for crude petroleum and petroleum products.

Wholesale price index (1947-49 equals 100) was 120.6 for April according to Bureau of Labor Statistics, as against 122.8 for March. In April 1960 the index was 115.4.

Crude oil production and crude runs to stills increased in the week ended July 7 according to reports from the industry.

Daily average output of crude, including lease condensate, was 6,970,000 bbls., up 82,000 bbls. from the preceding week.

Daily average crude runs to stills of 7,954,000 bbls. were 165,000 bbls. above the preceding week and 326,000 bbls. above the comparable week last year.

Runs of foreign crude amounted to 1,128,000 bbls. daily, compared with 1,055,000 bbls. daily during the previous week.

Price Trends

Advanced

None

Reduced

Benzene, 3c. per gal.

Comparative Price Indexes

(100=1940 average)

Last week	Prev. week	Last month	July 23, 1960
103.95	104.11	104.11	103.74

For Current Prices See Page 11

Aromatic Solvents

Benezene—The 3c. cut in price effected July 18 drops benzene quotation back to 1959 level when 31c. a gallon also applied.

At 31c. price is the lowest posted since 1952 when coaltar benzene was quoted at 30c in the Pittsburgh district.

Supply is currently rated at more than adequate, both from petroleum and coke oven sources.

Demand is reported strong.

LPG's

LPG production in the last two weeks of June displayed a narrow gain from the previous two-week reporting period. From 388.4 million gallons turned out during June 1-15, output rose to 389.8 million gallons during June 16-30.

Inventories at plants, terminals and underground mounted to 1,297 million gallons as of June 30 as against 1,199 million gallons on June 15 .

All categories of lpg's gained in output except butane-propane mix and iso-butane, both of which declined marginally.

Butane—Production rose to 98.2 million gallons during June 16-30 as against 85.4 million gallons in the previous fortnight.

Stocks rose to 413.7 million gallons as of June 30, compared with 371.1 million gallons on June 15.

Ethane-ethylene—Output rose to 27.9 million gallons during the last two weeks of June as against 26.2 million gallons during June 1-15.

Stocks remain unchanged at 913,000 as of the June 30 reporting date.

Propane—Production climbed to 184.2 million gallons during June 16-30 as against 177.6 million gallons in the previous two weeks.

Stocks also climbed, reaching 747.6 million gallons on June 30 as against 694.3 million gallons on June 15.

Crude Oil Stocks Climb

Domestic and foreign crude petroleum stocks at the close of the week ended July 8 were 475,000 bbls. higher than at the end of the preceding week.

Week ended July 8—257,904,000 bbls.

Preceding week—257,429,000 bbls.

This increase comprises a decrease of 810,000 bbls. in stocks of domestic crude, and an increase of 1,285,000 bbls. of foreign crude.

(Source: Bureau of Mines)

Waxes

Wax business is reported in a trough at present. Seasonal slowdown in demand is taking its customary summer toll on orders.

Sources report supply remains in excess of demand for most types and grades.

Refinery inventories are reported high with commensurate price shading.

Business is expected to regain volume in September.

Export trade continues relatively heavy to Europe, Latin American trade is slow.

Most exporters switched to foreign flag vessels during the recent strike to avoid delays. Some oil companies suffered ancilliary strikes at refineries and thus had wax output restricted as well as having their American flag tankers tied up.

Miscellaneous

Mineral Oils—Diversification of end uses continues to aid in creating a steady market for all grades of mineral oils.

Some heavy inventory building was reported during the protection period following April price advance notice. Now, however, sources report consumers are back in the market again in good strength, ordering normal volume.

Recent shipping strike had little effect on domestic shipments of mineral oils. Export shipments did encounter some difficulty with delays, sources relate.

Prices for all grades are unchanged at levels established in the second quarter.

Supply of raw materials is freely available.

Petroleum Briefs

BADGER COMPLETES UNIT: Badger Manufacturing Company, Cambridge, Mass., has completed a 32,000 b.p.d. vacuum distillation unit designed for Ashland Oil & Refining Company. The new unit is on stream at Ashland's No. 2 refinery at Catlettsburg, Ky. Producing light and heavy gas oil for catalytic cracking charge stock, cylinder stock and asphalt, the new facility replaces three smaller vacuum units.

OIL KNOW-HOW SOUGHT: Al-Chabieh du Petrole Company, Syrian Region, United Arab Republic, is seeking help in creating a mineral and industrial oils plant in Syria. Initial capacity of the plant is slated at 6,000 metric tons a year. What's needed is US technical assistance, machinery and raw materials. Those interested in participating in the project should write: Al-Chabieh du Petrole Co., Syrian region, United Arab Republic.

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Aliphatic Organics

Two chemical concerns reported last week that both sales and earnings in the first half of 1961 fell below those of the comparable period in '60. Noted by both, however, was the surge in business during the second quarter—to an all-time high for one firm, while June volume set a new monthly record for the other. Ranking first and fourth in the US chemical world, according to the latest *Fortune* survey, and both major producers of aliphatic organics, the firms' performance can be taken as fairly indicative of what the rest of this industry has been doing.

What's ahead? Many in business think August will be a good month. Steel producers are lowering forecasts, but nonetheless expect next month's output to be substantially above the current rate. They're figuring that the auto makers will not get into new car production as quickly as originally planned, thus postponing some steel orders until September.

Requirements for plywood, a major end-market for formaldehyde, are also expected to rise in August. The Douglas Fir Plywood Association, official spokesman of the industry, is predicting that demand will increase to 85 percent of capacity from 83 percent in July and 82 percent in June.

Chemical marketers, for the most part, expect that buying next month will continue at a quick pace. The obvious reason why it should is that most of their customers are maintaining only minimal inventories.

Price of industrial refined sucrose has been cut 15 cents, to $9.30-$9.40 a hundredweight depending upon shipping point. An intensely competitive market and attendant pressures on sellers of the product to meet a variety of contractural agreements and prices reportedly occasioned the reduction.

A major chemicals producer has just completed a methyl chloride plant with a rated annual capacity of 25 million pounds. Production will be used captively as well as sold on the open market.

Acetone—Production of acetone, which observers predict will be a billion-pound chemical by 1966, rose to 761,301,000 pounds last year from 736,209,000 pounds in 1959.

Output via isopropyl alcohol, however, declined to 612,721,000 pounds from 622,139,000. Making up the difference apparently was cumene-byproduct acetone.

Figuring the manufacturing process yields six-tenths of a pound of acetone per pound of phenol, output of acetone via cumene last year amounted to slightly under 104 million pounds. This leaves approximately 44.5 million pounds of acetone from fermentation and LPG's.

Sales of acetone last year totaled 453,901,000 pounds, valued at $31,399,000. In '59, sales were 441,744,000 pounds, valued at $31,699,000. Average per pound price both years was 7 cents. This is the official tankcar quote now because of the 1c. a pound cut in mid-June.

Prior to the price reduction, reports of special pricing situations were fairly common. This factor coupled with the increasing availability of byproduct acetone and lower-cost competitive chemicals, such as methyl acetate, reportedly toppled the higher price structure.

Acrylonitrile—Production of acrylonitrile last year was 229,247,000 pounds. Sales, the Tariff Commission reports, were 183,585,000 pounds, valued at $41,167,000.

Output in 1959 was slightly higher at 232,253,000 pounds. So too were sales which totaled 192,091,000 pounds, valued at $49,594,000 for an average per pound price of 26 cents.

The 1961 report will show an appreciably lower price, due to the recent 8½c. a pound across-the-board reduction, and possibly a rise in sales sufficient to compensate for the smaller per unit cost.

One area to which marketers of acrylonitrile are looking for growth is acrylonitrile-butadiene-styrene terpolymers. These are very versatile resins which can be competitive with the newer polyformaldehydes, such as "Delrin" and "Celcon," in some applications, it's believed.

ABS resins consumption by the auto industry alone is expected to run up to 100 million pounds by 1965.

Current schedule for acrylonitrile is:

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	July 23, 1960
130.17	130.17	130.22	132.06

For Current Prices See Page 11

tankcar, 14½c. a pound; drum carload, 17½c. a pound; smaller drum lots, 18½c. a pound.

Carbon Tetrachloride—Imports of carbon tetrachloride in May were unusually large at 1,062,546 pounds. Source of most of this material was Belgium (943,746 pounds, valued at $53,979 and dutied at $8,022). The remainder (85,800 pounds, valued at $7,278 and dutied at $1,011) came from Italy.

Ethyl Alcohol—Imports of ethyl alcohol in May amounted to 1,412,142 gallons. Valued at $351,428 and dutied at $40,375, this material was classified by the Commerce department as "for immediate consumption," meaning the duty was paid and the stuff transfered to the buyer's facilities.

The entire quantity represented a single shipment from Brazil to Philadelphia.

An additional 3,150,000 gallons of alcohol (in two shipments) also traveled this route in May, but this material went to government bonded warehouses. Nothing came in at Galveston, Tex.

There's a question now as to whether large quantities of alcohol will continue to be brought in at Philadelphia. The importer presumably is the same firm which recently completed negotiations with the USDA for some 14 million bushels of surplus corn, which is thought to provide sufficient raw material for the firm's alcohol manufacturing requirement.

Formaldehyde—Formaldehyde sales may be aided by an expected upturn in plywood requirements next month. The Douglas Fir Plywood Association predicts demand in August will rise to 85 percent of industry capactiy from 83 percent in July and 82 percent in June.

Despite the rise in production, however, plywood prices are pretty weak. One-quarter inch sanded plywood panels are said to be unofficially discounted at some mills to $66 a thousand feet from a list of $68. Price on this key grade a year ago was $64.

Blame for the unsettled price situation apparently rests with the sellers themselves who are obviously competing vigorously for business. For their part, reportedly, lumber wholesalers and retailers are buying hand-to-mouth, apparently undisturbed by price fluctuations.

Housing starts, despite the government's attempt to promote new construction via easier terms on federally-insured mortgages, have not increased as previously anticipated, thus restricting plywood demands.

Production of formaldehyde last year was 1,872,448,000 pounds. Approximately one-third of this figure, or 678,262,000 pounds, represented open-market sales valued at $22,649,000.

In 1959, output was 1,750,218,000 pounds, according to the Tariff Commission, while sales totaled 685,986,000 pounds, valued at $22,965,000.

Both years, the average per pound price was 3 cents. The sales loss in '60 apparently represents start-up of formaldehyde production or expanded facilities by consumers of the chemical who were wholly or partly open-market buyers in '59.

Methyl Chloride—A major chemicals producer has just completed a methyl chloride plant at its Baton Rouge, La., manufacturing center.

The new facility has a rated annual capacity of approximately 25 million pounds. An undisclosed percentage of production will be used by the firm captively in the manufacture of tetramethyl lead and other lead alkyd antiknock compounds.

Methyl chloride is also used as a catalyst solvent in the manufacture of butyl rubber, as a reagent in the production of

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Aliphatic Organics

silicones, as a refrigerant, and as a basis for methyl cellulose plastics.

That the market for the chemical is growing is apparent from Tariff Commission statistics which show a very substantial gain in both production and sales during 1960.

Output was 84,175,000 pounds last year as opposed to 67,067,000 pounds in '59. Sales meanwhile rose to 43,404,000 pounds from 31,931,000, and without any loss of revenue due to lower prices. Average per pound price for methyl chloride both years was 12c. a pound.

Molasses — Markets for feeding cane molasses were steady during the week ended July 18. Demand was slow but near normal for mid-summer. Prices at New Orleans continued at 14½c. a gallon, and at New York the range was 15½c. to 16c. a gallon, also unchanged. These prices were appreciably higher than year ago levels of 8¾c. a gallon at New Orleans and 13½c. a gallon at New York.

Perchloroethylene—May imports of perchloroethylene totaled 1,188,200 pounds, valued at $96,226 and dutied at $5,774. Shipping here were: France 947,405 pounds, valued at $74,362 and dutied at $4,463; Canada 237,080 pounds, valued at $21,476 and dutied at $1,288; and West Germany 3,715 pounds, valued at $388 and dutied at $23.

Domestic production of perchlor last year was 209,408,000 pounds, roughly 6½ million pounds above the '59 level. Sales, at 187,210,000 pounds, were up about 1 million pounds. Average per pound price, however, dropped from 11c. to 10c. a pound.

Spot market is competitive, as usual. Requirements, according to some sources, are seasonally off.

Sucrose—An intensely competitive market and attendant pressures on sellers of industrial refined sugar to meet a variety of contractural agreements and prices reportedly occasioned the 15c. a cwt. reduction on July 5.

A second but relatively insignificant factor behind the price cut was the assurance of near-adequate supplies of raw sugar which came with the reallocation of an additional 150,000 tons of the Cuban total to the Philippine Republic. This left only 50,000 tons of the country's 10-million-ton requirement for '61 still unassigned.

The current schedule is $9.30 to $9.40 a cwt., the range reflecting differences in shipping point and terms.

Trichloroethylene — An apparent discrepancy in trichloroethylene import statistics as reported by the Commerce department makes it impossible to give the complete trade picture for May. Believed to be correct, however, are these figures on shipments from individual countries:

Belgium 659,966 pounds, valued at $38,168 and dutied at $2,863; West Germany 657,383 pounds, valued at $38,019 and dutied at $2,851; United Kingdom 488,420 pounds, valued at $29,997 and dutied at $2,249; Sweden 65,000 pounds, valued at $3,909 and dutied at $293.

Also, Canada 52,900 pounds, valued at $5,829 and dutied at $437; Netherlands 49,502 pounds, valued at $3,253 and dutied at $244; France 35,642 pounds, valued at $2,545 and dutied at $191.

Statistics on Italian shipments appear to be at fault, however. On total imports of 172,332 pounds, the value, Commerce says, was $105,314 and the duty $7,899. Clarification is expected.

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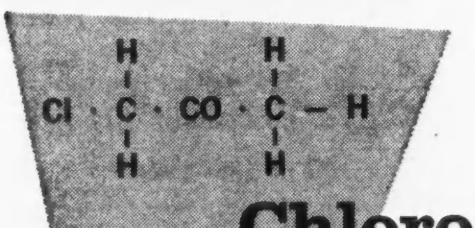

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See page 73—1961 Buyer's Guide Issue

Allied, Socony, and CPC Agree on Urea Expansion

Partners in a Taiwan urea project reached a preliminary agreement to increase their investment from $16.5 million to $22.5 million.

The plant, projected for Miaoli in north Taiwan, is a three-way venture of Allied Chemical Corporation, Socony Mobil Oil Company and Chinese Petroleum Corporation.

If ratified by the boards of directors, the new arrangement is expected to increase the plant capacity from 100,000 tons to an estimated 150,000 tons of urea yearly.

A spokesman for Allied emphasizes that board action is needed before the agreement becomes final.

It would supercede the original contract between Socony and Chinese Petroleum dated December 22, 1960. Under its terms, the two American firms would put up 70 percent of the Capital and CPC the remaining 30 percent.

PE Is Smaller Fire Hazard Than Tarpaulin, Says AEC

Sheet polyethylene presents a less serious fire hazard as a construction material than canvas tarpaulin. So says the Atomic Energy Commission.

In a letter to the Manufacturing Chemists' Association, AEC reports that its test show that "the melting point is so low that hot objects coming in contact with the polyethylene melt through, rather than ignite it."

As a result, AEC says, the commission and its contractors have been using polyethylene sheeting for many purposes, including enclosures for construction work, covering construction materials and as an aid for curing concrete pours.

Washine Chemical Offers Methyl, Propyl Parabens

Washine Chemical Corporation, Lodi, N.J., has begun production and marketing of a series of methyl and propyl parabens and related calcium and sodium salts. The materials, used as preservatives, are offered in both USP and technical grades.

Technical grades are being marketed under the trade names "Chemocide MK" and "Chemocide PK." Trade names and patents were acquired from the estate of the former Chemo Puro Manufacturing Corporation. USP grades are identified under their generic names.

BDSA Chief Named

Thomas E. Drumm, jr., who has been serving the government in key positions in the United States and Europe for the past fifteen years, has been named administrator of Business & Defense Services Administration by Secretary of Commerce Luther H. Hodges. He has served as assistant administrator since September, 1958, and acting administrator since March, 1961.

Reynolds Metals Schedules PVC Expansion in Virginia

A major increase in production facilities has been slated at Reynolds Metals Company's plastics plant in Grottoes, Va.

The program, scheduled for completion by year-end, will increase the plant's capacity for production of "Reynolon" oriented polyvinyl chloride plastic film to a level about triple that of a year ago.

The expansion has been prompted by new packaging applications of the "Reynolon" film which have sharply increased demand, the company says.

Increasing use of the film for wrapping fruits and vegetables and a multi-pack wrapper for bundling of cans, canisters, and cartons are cited.

A previous increase in the plant's production capacity, launched in May, 1960, is reported nearly completed. It includes new equipment for production of PVC and another "Reynolon" plastics product —water-soluble polyvinyl alcohol film, used for individual portion packets of detergents, dry bleaches, and other products.

Stauffer Absorbs Nyotex Unit

Nyotex Division of Stauffer Chemical Company has been terminated as a separate product division and will now be operated as part of the industrial chemicals division. John Stris, formerly assistant general manager of Nyotex, has been appointed southwest production manager of the Industrial Chemicals Division. He will continue to be headquartered at the Houston, Tex., plant.

Jobs & People

American Mineral Spirits Company, Chicago—**J. T. Hosse** has been named sales representative in Nashville, Tenn., and **Morris Clyde** will take over the Louisiana and Southern Mississippi territory.

Hercules Powder Company, Wilmington, Del.—**Dr. W. Donald Thompson** has been appointed manager of research and development for the fiber development department with headquarters in Covington, Va. **Dr. Gilman S. Hooper,** director of development for the department, will move his headquarters from Cleveland, Ohio, to Wilmington, Del.

Pennsalt Chemicals Corporation, Philadelphia, Pa.—**Melbourne P. Binns** has been named Atlanta, Ga., regional manager for the industrial chemicals division, succeeding **Robert W. Wurst,** who died recently.

Reheis Company, Berkeley Heights, N.J.—**Daniel C. Reheis** has been named production manager and purchasing agent in addition to his duties as assistant secretary.

Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation—**John K. Harvey,** company official on temporary assignment with Business & Defense Services Administration, has been presented with a Certificate of Service by the Commerce Department as his government work ends.

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Agricultural Chemicals

Ammonia Build-Up Continues Apace Despite Price Indecision by Industry

Ammonia producers are apparently finding it a lot easier to lay out millions of dollars for expansion programs than reaching a decision on this season's ammonia price. This is felt to be the result of the somewhat muddled short-term market outlook versus its very favorable growth potential over the next five years. Since the beginning of the year, US ammonia producers have announced plans to expand capacity by about 300,000 tons annually. Most of the new plants are slated for on-stream target dates in late-1962.

Expansions of US ammonia capacity are felt to be realistically in line with the industry projections of consumption over the next five years. Biggest growth potential for ammonia is seen in direct applications. Although a relatively recent development in direct applications, use of ammonia for this purpose is said to offer excellent market potential.

Direct application ammonia consumption is expected to grow at an average rate of 5 to 10 percent a year in the next decade, according to the Agricultural Ammonia Institute. In this period, the Institute finds, ammonia will provide 70 percent of the direct application nitrogen, as compared to its present position of supplying about 33 percent.

A disappointing spring, in part due to bad weather conditions and the administration's grain bank program, is reported to have taken some of the edge off the ammonia market.

With the exception of one producer, the industry has been a little reluctant to announce prices for the 1961-62 fertilizer year. The one listing brought out to date would discount ammonia during the off-season, a practice that does not set well with some marketing men in the industry.

West Coast ammonia prices have firmed up considerably in the past few months, sources report. On August 1, prices will be boosted $8 a ton to $77 a ton. While still $15 a ton below the current listings for its East Coast equivalent, California-based producers report that they are optimistic that the gap in the listings will eventually be closed.

Some West Coast ammonia producers have announced August 1 prices of $92 a ton, but have hedged their stand by freight-equalizing with lowest competitor's prices.

Improvement in the West Coast ammonia market is an outgrouth of improved demand which has siphoned off some of the excess supply that has troubled producers there. Co-ops remain the biggest threat to ammonia listings on the West Coast.

With ammonia listings firming on the West Coast, the trade does not regard that area as the perennial threat it offered to other ammonia market areas in the past. As to prices East of the Rockies, producers were not saying much last week. Indications are that they are deciding to either raise prices somewhat or hold them at their present position.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	July 22, 1960
117.80	117.80	111.70	109.97

For Current Prices See Page 11

Animal and Plant Foods

Bids are invited by the Government of Greece for supply and delivery of various agricultural chemicals estimated to cost a total of over $1 million, the Bureau of Foreign Commerce reports.

Bid No. 1648, covering various herbicides, insecticides, fungicides and growth regulators, has been divided into three series. The bid deadline for Series "A" is August 16; Series "B," August 24; and Series "C," September 5.

Bids should reach the Permanent Supplies Committee, Agricultural Bank of Greece, Athens, before 3:30 p.m. on the indicated bid closing dates.

A copy of the terms of the contract and specifications are available on loan from BFC's Trade Development Division, US Department of Commerce, Washington 25, DC.

An allotment of $2,570,000 to Viet Nam for the purchase of fertilizers and fertilizer materials was made last week by the International Cooperation Administration. The contracting date extends until October 31 with deliveries scheduled before the end of the year.

The authorization includes $1.8 million for nitrogenous fertilizers, $370,000 for potash fertilizers, $300,000 for chemical fertilizer mixtures, and $100,000 for phosphates and phosphatic fertilizer materials.

Ammonium Sulfate—Market continues quiet with listings for the 1961-62 fertilizer year unchanged from last season. That price is $32 a ton.

Nitrogen Solutions — Late season demand for nitrogen solutions has pushed sales well above expectations, sources report. Applications are expected to drop off in the latter part of the month as the fertilizer season comes to a close.

Urea—To date, no consistent pattern has emerged from the confusing array of listings that have been announced by several leading producers. It seems likely, sources report, that the confusion on urea listings will drag on right into September.

At that time demand for urea begins to reach a peak and producers will find it necessary to bring out new prices to stabilize the market.

For the remainder of the summer, very little business is expected for the feed and agricultural grades of urea.

There are three basic categories that sums up the price situation in the urea market. The first would continue to quote urea at its current price of $92.50 a ton for agricultural grades on an f.o.b. plant basis. A second possibility includes a price hike of $2 a ton to $98 a ton, delivered. The last alternative provides for the discounting of urea for the first time and the adoption of a zone system similar to the one used in the marketing of ammonium nitrate.

Imports of urea in May totaled 8,120 tons, down from the 11,000 tons imported during April and March. Value of imports was set at $685,246 with the leading exporters reported to be Canada (3,495 tons) and Norway (1,899 tons).

Pesticides

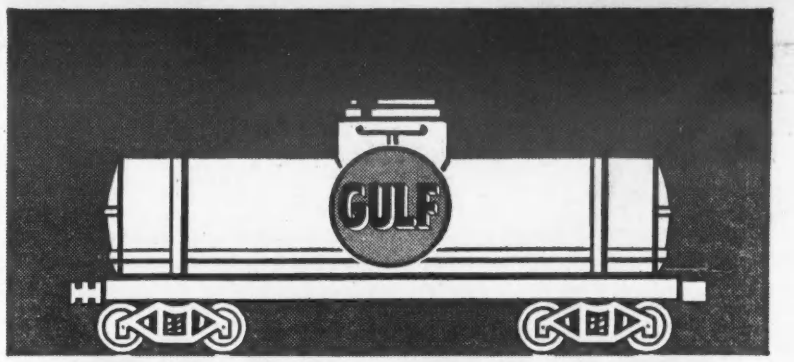
The first large-scale field trials of "gyplure," a synthetic attractant for gypsy moths, are under way in New England and on Long Island, N.Y., according to the US Department of Agriculture. "Gyplure" is a development of the USDA's Agricultural Research Service.

Purpose of the trials is to find out whether "gyplure" can aid State-Federal efforts to control the gypsy moth, a destructive, leaf-eating insect pest of forest and shade trees in the Northeast.

USDA reports that "gyplure" is a man-made chemical that attracts male gypsy moths as effectively as the natural attractant possessed by females of this species. The tests now in progress will help determine the future usefulness of "gyplure" in (1) preventing gypsy-moth matings; (2) detecting new infestations of the pest at an early stage; and (3) possibly in trapping and killing the insect in sufficient numbers to cause a worth-while reduction in gypsy-moth populations.

USDA scientists want to learn whether "gyplure" will confuse the male moths enough to keep them close to the ground or on tree foliage and away from the females, which do not fly and usually stay on tree trunks.

"Gyplure" is reported to be readily available and inexpensive. An ounce of this chemical, equivalent to the amount of natural attractant obtained from 30 million female moths, costs only 60 cents and is enough to bait more than 2 million traps, USDA reports.



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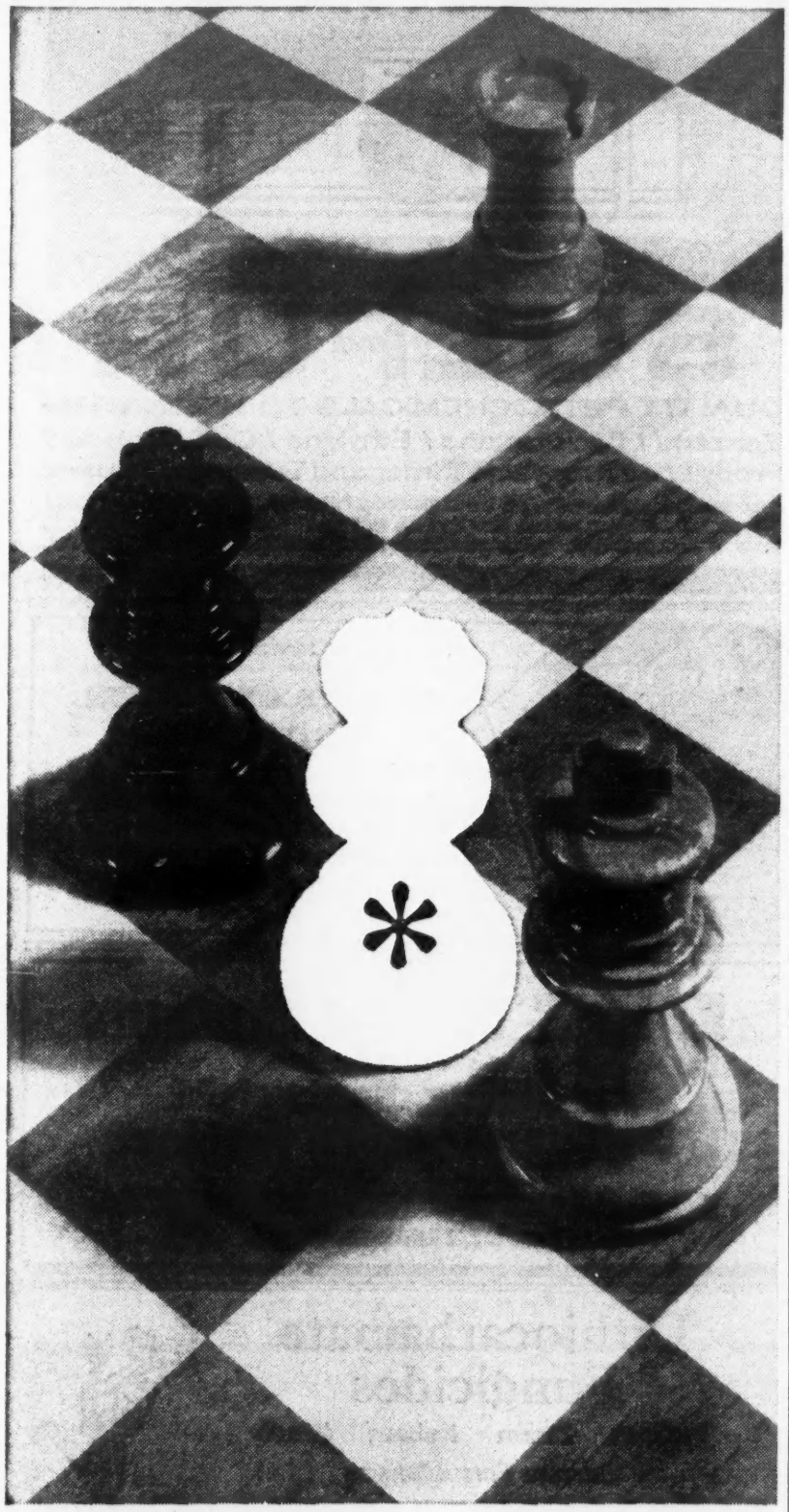

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KOPPERS COAL CHEMICALS

Coal Chemicals

Benzene price is now 31 cents a gallon. The 3 cents a gallon price cut was put into effect July 18 by a major coke oven producer. Latest reports indicate the new price is being met by all significant coke oven and petroleum suppliers of benzene. Coming with a suddeness that caught veteran observers off guard, the 3 cent reduction is believed by some trade sources to be the result of a battle between a coke oven supplier and a petroleum source of benzene over a major market outlet. What happened, one reliable source relates, is that a petroleum benzene supplier began offering 32-cent material to a major consumer who normally buys large-volume lots of benzene from a coke oven supplier. In order to meet competition and secure its traditional market, the coke oven supplier went under the 32-cent price and established its quotation at 31 cents.

Other suppliers, faced with a 3-cent differential between the long-standing market price of 34 cents and the new price of 31 cents, quickly moved to become competitive at the lower listing.

Other price activity last week was limited to a 3 cents a pound across the board reduction in o-toluidine by a major producer.

Up 2 percent went production of oven and beehive coke in 1960 reports Bureau of Mines in its annual study of coke and coal chemicals. This marginal gain was accounted for by oven coke as beehive coke output dropped 6 percent during the year.

Oven coke production hit its high during the first quarter at 6.1 million tons and fell each succeeding quarter until a low of 3.6 million tons was turned out during October-November.

Basic coal chemicals output was higher in 1960 when compared to the previous year primarily because more coal was carbonized in slot-type ovens the Bureal states, and also because of an increase in yields.

Crude light oil output went up 10 percent and crude tar, 5 percent.

Increase in crude light oil made more material available for refining at coke plants resulting in gains in light oil derivatives.

Probably the most important development in 1960 relating to aromatic chemicals production, reports the Bureau, was the vast expansion program in the petroleum industry.

Impetus for this program was the anticipated wider market for benzene which, the Bureau states, will be much higher than can be obtained from coal carbonization and imports.

Price Trends

Advanced
None

Reduced
Benzene, 3c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	July 22, 1960
119.81	119.82	117.90	118.30

For Current Prices See Page 11

Basic Products

Benzene—One of the immediate questions arising from the 3-cents-a-gallon price cut is what effect will the reduction have on the prices of benzene-derived chemicals?

The answer is none at all over the near term according to trade sources.

One major styrene producer remarks that the new 31c. level is within the escalation clause range of 31 to 34c.; thus no change will be made on that basis.

Phenol is currently firm reports another producer. At any rate a 3c. benzene drop at the most could only have a ¼c. a pound effect on phenol.

A dodecylbenzene producer notes that the DDB price was cut back in March to near rock bottom and that it's doubtful another reduction would be contemplated at this time.

DDT prices were only recently slashed making it unlikely a further reduction could be looked for in that area for the near future.

Maleic anhydride is, of course, oversupplied and reported weak. Still, there's no indication a price drop is thought of, although of all the derivatives, maleic's supply position is the most unfavorable at present.

Aniline appears secure at current listings.

The new 31c. price puts benzene back at the level held throughout 1959. Price history for the period 1952-1961 follows:

		High	Low
1961	gal.	34c.	31c.
1960	gal.	34c.	34c.
1959	gal.	31c.	31c.
1958	gal.	36c.	31c.
1957	gal.	36c.	36c.
1956	gal.	36c.	36c.
1955	gal.	*36c.	*36c.
1954	gal.	*40c.	*40c.
1953	gal.	*40c.	*30c.
1952	gal.	*30c.	*30c.

*Coaltar benzene only. Pittsburgh district.

Supply/demand situation is currently rated as in balance. No overly large supplier inventories are reported. Customers are able to secure needs within reason without difficulty.

Phenol—Market conditions are reported firm for synthetic and natural phenol.

Price decrease for benzene is not likely to produce any proportional drop in phenol.

At a 3c. reduction the effect on the cost of producing phenol is reckoned at about ¼c. per pound.

In view of the attempt earlier this year to boost phenol prices, it's not too likely, sources argue, that phenol producers will weaken their current price structure.

Tar Acid Oil—Production of tar acid oil jumped 11.5 percent in May for a total of 2,489,410 gallons up a quarter of a million gallons from April output.

On the year through May, however, production was far behind the comparable five month period of 1960. Output through May 1961 was 10.7 million gallons, as against 14 million in the same period last year.

Sales of tar acid oil in May outgained production as a 12.4 percent increase was noted over April sales. Total for May was 2,133,308 gallons as against 1,897,788 for April.

Sales for the first five months of 1961 are far behind the pace set last year. Sales through May 1961 are put at 9.7 million gallons compared to 13.5 million gallons in the same period of 1960.

Intermediates

Aniline—Continuing apace with auto production, demand for aniline has recovered from the slow state of business

Cokeoven Output: May

The following statistics indicate production of selected coal chemicals as reported to the Bureau of Mines by cokeoven plant operators. Benzene statistics do not include motor benzol. All figures are reported in gallons.

	May 1961	May 1960	First Five Months 1961	First Five Months 1960
Benzene, nitration	7,379,129	9,406,002	31,049,725	53,589,552
Industrial pure	2,552,249	3,352,382	12,483,788	18,407,847
Industrial 90 and other	122,485	186,227	667,297	950,344
Coaltar, crude	52,849,408	63,650,556	230,817,619	354,729,267
Chemical oil crude (tar acid oil)	2,489,410	2,640,580	10,705,615	13,926,079
Solvent naptha, crude and refined	307,837	448,697	1,615,568	2,355,205
Toluene, nitration	1,953,072	2,310,314	8,763,183	12,215,887
Industrial pure	628,569	514,621	2,236,633	2,726,665
Xylene, all grades	735,701	649,419	3,128,048	3,719,095

Coal Chemicals

dominant during the past fall, winter and early spring.

Rubber accelerator demand still spurs calls although auto demand over the summer is not expected to be as high as once thought.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended July 15, were as follows:

Ammonia liquor	lbs.	556,754
Ammonium sulfate	lbs.	23,698,829
Benzene	gals.	2,552,666
Coaltar	gals.	12,878,885
Crude chemical oil	gals.	504,230
Solvent naptha	gals.	84,038
Toluene	gals.	567,259
Xylene	gals.	157,572

Recent price drop for benzene is not expected to have much of an impact on aniline sales or price. One trade source remarks that the 3c. benzene reduction effects only a .35c. drop in aniline costs.

Dodecylbenzene—Sources report constant demand for DDB.

Annual plant shutdowns are due throughout July but will have no effect on supply.

Supplies are ample, considered even a bit long if anything.

Decrease in the price of benzene will apparently have no downward effect on DDB price.

Current quotation is 11c. a pound in bulk and 2.4 and 3.4c. higher for carlot and less carlot amounts.

Phthalic Anhydride—Supply of PA is reported more than adequate for needs.

Demand is fairly well sustained.

Excess supply is causing some shading according to trade reports.

In efforts to obtain specific business, some suppliers are believed to be cutting anywhere from ½ to 2c. from the listed prices.

Practice is not widespread and is thought to be limited to smaller-volume phthalic suppliers.

Styrene Monomer—One major producer remarks that the 3c. reduction in benzene will have no immediate effect on the price of styrene monomer.

Under the escalation clause, SM price is tied in to the price of benzene in the range of 31 to 34c. a gallon plus the cost of petroleum refining labor.

Since benzene price is now at the 31c. level, no drop in styrene is contemplated at this time, the supplier comments.

Current styrene business is reported proceeding at a good pace.

Activity is much improved over business earlier this year. The reason is held to be the improvement in the economy in general rather than any startling developments in the styrene market itself.

Price is now 11c. a pound in bulk, the price established on July 1.

o-Toluidine—A major producer of this dyestuff intermediate cut the price 3c. a pound across the board effective July 20.

New schedule is: drums, carlots, works, freight allowed, 27c.; drums, less carlot amounts, same basis, 28c., and tankcar amounts, same basis, 25c.

Cesium Metal Is Offered By Dow for Research Use

Dow Chemical Company is now offering cesium of 99.9 percent purity. Price is $375 a pound in quantities of one to four pounds; $325 per pound in five to nine pound lots.

Less-than-pound lots are available at $1 per gram with a packaging charge depending on ampule size. The cesium comes in steel and glass containers and in a "porcupine" package in which a number of graduated ampules protrude from the glass package, and these cesium containing units can be sealed off individually without contaminating the metal.

The cesium is expected to find use in ion-propulsion systems for outer space vehicles. Dow makes the cesium in Midland, Mich., through a metal-reduction process developed by Dr. Robert J. Moolenaar. Capacity is several pounds a day.

Strep Discoverer Scores

—Continued from page 4

processes to produce it. Rutgers Research & Education Foundation, which was organized by Dr. Waksman, owns this patent as well as those on streptomycin and neomycin. The foundation is said to be second in size only to Wisconsin Alumni Research Foundation.

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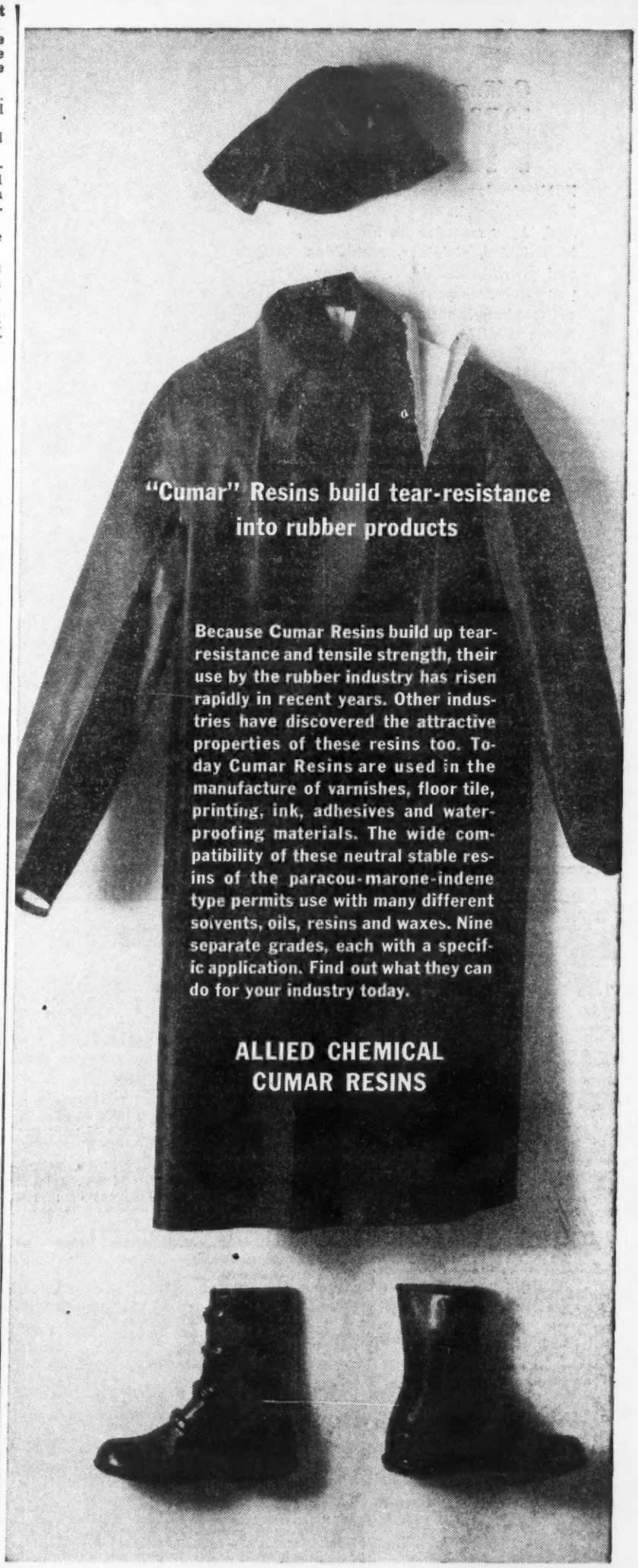
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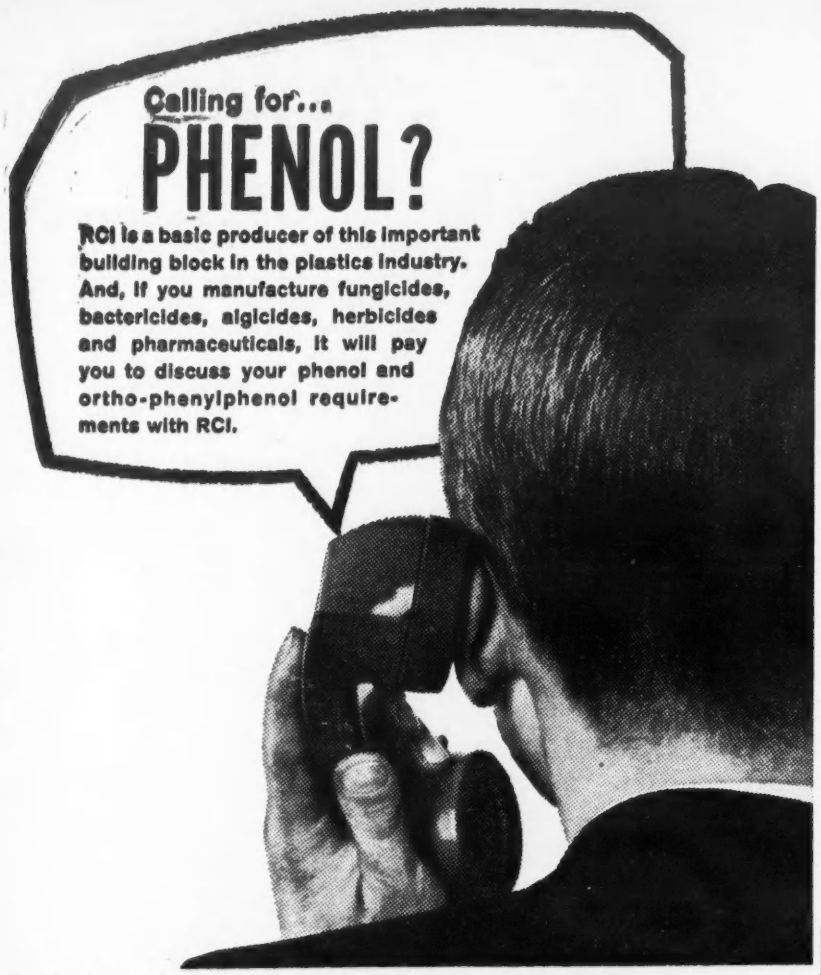
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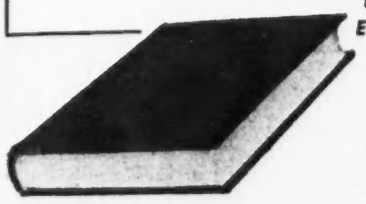

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Detergent Alkylate Prospects Cloudy

OPD 'Depth' Report on Detergent Alkylate

—*Continued from page 9*

troduced to syndets. This process will be slow, but inevitable.

The trend has been for a country to begin to import synthetics and then to start making its own. But the time-lapse between the importation of detergent alkylate to, say Afganistan, and the manufacture of detergent alkylate in that country is likely to be considerable.

Certainly not a backward country, but a possible large detergent alkylate importer in the future, is the Soviet Union.

If the current seven-year plan is fulfilled, by 1965, there will be 400,000 tons of natural oils and fats (now used to make soaps) released to the food industry.

By the time this is accomplished, the Soviet Union hopes syndets will account for from 30 to 35 percent of its total soap output.

No Syndets in USSR Homes

But at the present time there is no synthetic detergent in Soviet homes. There are factories which produce alkyl aryl sulfonate, but there are no facilities to produce sodium tripolyphosphnate, sodium metasilicate or carboxymethyl cellulose.

An article in *Ekonomischeskaya Gazeta* has criticized all partakers in the program for:

- Being too slow with construction of raw material plants.
- Absence of administrative coordination between technical chemists and financial planning.
- Unworkable formulas of the scientific institute for detergent factories.

The head of the Moscow soap factory Svoboda complained that as yet he is still awaiting better formulas from the scientific state institutes.

Detergent Alkylate Reprints Soon

OPD's special "depth" report on detergent alkylate is being reprinted and will be available shortly. Copies may be obtained at 50 cents each (discounts on quantities of a hundred) from OIL, PAINT AND DRUG REPORTER's Reprint Department, 30 Church Street, New York 7.

The vice-minister for trade for the Russian Federated Soviet Republic reported on constant rejections because of poor quality.

Not only does output of detergents remain behind planned goals, but some plants cannot get more than half of their output into the trade because of the shortage of packaging material.

Russia may find herself in a position to buy detergent alkylate from another nation, but by 1965, when the Soviet seven-year plan ends, ABS may be already on its way out.

With all the boondoggling going on in Russia, US producers aren't too happy about the status of their own industry. One producer foresees a growth rate here of about 3 percent a year until 1965, followed by a whopping 50 percent cut in output within a year's time.

His reasoning is that with intense efforts on the part of all to put out a cheap, readily-broken-down surfactant, a breakthrough will be achieved. When this happens, ABS demand will immediately fall off and, five years later, the new material will replace ABS almost completely.

The soapers have no comment to make on this view, except that the field is wide open for suitable products. They have no loyalty to any particular product and would, supposedly, switch to anything cheap enough that can do the job.

If complaints about frothing and ground-water pollution increase during the next year or so and legislation is enacted to restrict the use of ABS, alternate products may be developed even before 1965 and the predicted 50 percent drop-off may occur in advance of that date.

This is unlikely and it is reasonable to assume nominal growth will take place during the next few years. In the long run, however, it is almost a sure thing that ABS will lose out to more readily biodegradable materials.

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Drugs, Fine Chemicals

A leading drug and fine chemicals maker has started commercial production of n-acetyl-p-aminophenol via a new process, which yields a product of high quality and purity reportedly, at its North Chicago plant. Process details and capacity were not disclosed, nor was anything said in the official release about prices. More than likely, however, the firm will quote at existing levels. With the debut of new production several months ago, one will recall, prices were cut appreciably.

An analgesic-antipyretic product with low toxicity and excellent stability and compatibility properties, APAP is considered to have a good growth potential. In fact, it's understood that several people not now in the business have been studying the market carefully with an eye to getting into production of the chemical with or without a captive requirement.

Phenobarbital, which was recently reduced 40 cents a pound, was one of the major losses of 1960. Both production and sales of the calming agent fell appreciably below 1959 volume. Two factors, their relative importance difficult to assess, are thought to have caused the decline. The first is imports and the second, competition from newly-developed, loudly-promoted tranquilizers.

Drug manufacturers plan to invest a record $227 million this year in research for new cures for human ailments. Their 1960 expenditure was $206.5 million, triple the amount spent in 1951. Over the past decade, Pharmaceutical Manufacturers Association reports, research spending has climbed an annual $16.7 million.

N-Acetyl-p-Aminophenol—A new process for the production of n-acetyl-p-aminophenol of "high quality and purity" has been developed by a leading drug and fine chemicals manufacturer.

Commercial production of APAP via the new process, details of which were not revealed, has begun at the firm's North Chicago plant. The compound will be available immediately to ethical and proprietary drug companies.

APAP is an analgesic-antipyretic product with low toxicity and excellent stability and compatibility qualities. It is the active metabolite of phenacetin and as such has fewer side effects, as substantiated by numerous pharmacologic studies, it's said.

Camphor — Imports of natural refined camphor in May totaled 32,048 pounds and were valued at $14,308 and dutied at $961. Shipping here were: Japan 22,900 pounds, valued at $10,375 and dutied at $697; Taiwan 5,148 pounds, valued at $1,453, and dutied at $154; and Hong Kong 4,000 pounds, valued at $2,480 and dutied at $120.

Synthetic camphor imports in May amounted to 190,500 pounds, valued at $70,719 and dutied at $9,525. The United Kingdom was the source of 114,500 pounds (valued at $41,348 and dutied at $5,725) while West Germany supplied the remainder.

USP synthetic camphor powder was advanced 3c. a pound on July 1 by a domestic producer. The schedule became: ton lots, 55c. a pound; 1,000 pounds, 56c. a pound, and lesser quantities, 57c. a pound.

Prices for USP tablets and technical material are unchanged.

Iodine — Imports of crude iodine dropped from 272,027 pounds in April to 60,227 pounds in May. Notable also is that Japan was the larger of two shippers, accounting for 42,171 pounds at $41,217.

The remaining 18,056 pounds, which were valued by the Commerce department at $16,052, came from Chile.

The US government reportedly has been buying Japanes iodine for stockpile requirements. This fact was said to explain the sizable quantities of Japanese iodine that arrived here over the past several months.

Menthol—Both Brazilian and Formosan menthol are quoted at about $7.25 a pound, but a better price is probably obtainable on a large quantity order or a distress lot.

An uptrend could set in, however, in the next few weeks as pharmaceutical buying for predominately cold-weather preparations starts up. Consumption in cigarettes continues upward with the increasing popularity of the mentholated brands both here and abroad.

Imports of natural menthol, at 115,384 pounds in April, rose to 152,540 pounds in May. This material was valued at $967,-136 and dutied at $53,388.

Top place on the suppliers' roster was held, as usual, by Brazil, which accounted for 127,967 pounds, valued at $801,785 and dutied at $44,789. In second position, Taiwan shipped 10,860 pounds, valued at $75,578 and dutied at $3,801.

Other suppliers were Spain, Korean Republic, Argentina, Japan, West Germany, and Australia.

Synthetic menthol imports in May totaled 14,000 pounds, valued at $62,818 and dutied at $5,040. France was the major source (11,900 pounds), followed by Australia (2,000 pounds) and West Germany (500 pounds).

Phenobarbital—Phenobarbital was one of the chemicals to lose out in 1960. Both production and sales, the Tariff Commission says, fell below '59 levels. Two factors probably explain the situation but their relative importance is difficult to assess. One is imports and the other is the many new tranquilizers which have been loudly promoted within the past year.

Ostensibly to meet the foreign competition, at least two domestic manufacturers of phenobarbital cut prices 40c. a pound early last month. The listing for 100-pound lots became $2.85 a pound. This compares with actual, average per pound prices of $2.97 in 1960 and $3.24 a pound in 1959.

Production was 270,000 pounds in 1960, down from 297,000 pounds in '59. Sales at the same time dropped to 237,000 pounds, valued at $703,000, from 274,000 pounds, valued at $895,000.

Procaine Hydrochloride — Output of procaine hydrochloride rose in 1960 above the '59 level, but at the same time sales and prices declined.

According to the Tariff Commission, 1960 production was 377,000 pounds and sales 391,000 pounds, valued at $847,000. This made the average per pound price $2.17.

In '59, output was 323,000 pounds and sales 419,000 pounds, valued at $979,000. Average per pound price: $2.34.

It's believed that the sales loss reflects not a smaller market but a substantial rise in imports. Both US manufacturers of the chemical recently called for some protection from the foreign competition.

Pyridoxine—May imports of B_6 were 881 pounds, valued at $30,242 and dutied at $3,175. The entire quantity came from Japan.

The May shipment was double that of April and the largest for the year to date. No B_6 was imported in March, January and December 1960. The absence of foreign competition reportedly strengthened the market.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(1100—1949 average)

Last week	Prev. week	Last month	July 22, 1950
59.27	59.27	59.27	59.93

For Current Prices See Page 11

Botanicals

New crop arrivals have caused a few price reductions. Lower are wild cherry bark, witch hazel leaves, wahoo root bark, and senega root. For imported botanicals, however, recent changes have been predominantly upward. Small stocks and higher replacement costs are responsible reportedly.

Rumania, according to its Chamber of Commerce, ships about one-hundred-twenty varieties of medicinal plants, both wild and plantation crops. Most sought after, it's said, are chamomile, sweet briar fruit (for its ascorbic acid content), arnica, digitalis, peppermint, valerian root, pheasant's eye, and citronella.

Papain—Little if any papain coming into this country ever meets the standards required by Food & Drug Administration.

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Drugs, Fine Chemicals

In the two week period ended July 14, FDA detained 40 cases of the material, and in the prior two-week period, 5 lots (155 cases and 2 drums) were held by the agency pending clean-up.

Psyllium — Higher shipping prices caused dealers here to boost the spot quote on psyllium husks to a range of from 45c. to 48c. a pound.

Black seed is selling currently at from 42c. to 45c. a pound, the blonde at 18c. to 20c. a pound.

Witch Hazel Leaves—Collections have not been up to par reportedly, meaning shortages and high prices can be expected. Last winter, with little material available, the quote went upward steadily, finally hitting 80c. a pound.

Drug, Fine Chemical Briefs

ANTI-HYPERTENSIVE AGENT: Wallace Laboratories, Cranbury, N.J., is offering a new anti-hypertensive agent called "Capla" (Centrally Acting Pressure Lowering Agent). The drug produces reductions in blood pressure comparable to those caused by rauwolfia and veratrum preparations, but without, reportedly, the unpleasant side-effects. Known generically as mebutamate, "Capla" possesses mild tranquilizing action.

TRADEMARK CHOSEN: "Thibenzole" has been adopted as the trademark for thiabendazole, a new broad-spectrum anthelmintic, by Merck & Co., Rahway, N.J. The drug is reported to be active against thirteen different roundworm species infecting sheep and goats. It also shows promise against important parasites in cattle and horses, Merck says.

Pittsburgh Plate Is Getting Into Italy's Glass Business

Pittsburgh Plate Glass International, SA, of Geneva, Switzerland, has organized a new wholly-owned subsidiary in Italy to be known as Pennitalia, SpA.

The initial purpose of the new company will be to complete necessary engineering studies preparatory to the establishment of a sheet glass manufacturing and sales facility in Italy.

Pittsburgh Plate's interest in this venture has been motivated by a desire to participate in the ever-increasing markets for quality sheet glass in Italy and in the other countries of the European Common Market, as well as in other parts of the world which cannot be served effectively from Unitd States sources.

DMT Venture

—Continued from page 8

oxidation process, starting with petroleum-derived paraxylene as the raw material. This is the process in use at Amoco's 12-million-pound-a-year DMT plant in Joliet, Ill.

The new facility is expected to be in operation by 1963. The company declines to disclose capacity or cost figures.

AKU currently manufactures and markets "Terlenka" polyester fibers and yarns, the starting material for which is DMT. AKU is the parent of American Enka Corporation in this country.

Amoco Chemicals is a wholly-owned subsidiary of Standard Oil Company (Indiana). Amoco International SA is a wholly-owned Swiss subsidiary of Indiana Standard.

Bids Wanted

Ammonium Hydroxide, Technical, Type I, 26 degrees Baume (27 to 30 percent AS NH) in accord with Fed. Spec. O-A451D and amendment No. 1 dated 25 June '59 in approximately 13 gal. polyethylene carboy. Carboys must contain proper fittings for 1,000 Ozalid Printmaster Machine. Government estimate for one year period, 4,550 gal. Bid IFB ORD-20-089-1-62B. August 10. US Army Ordnance Arsenal Detroit, 28251 Van Dyke Ave., Centerline, Mich.

Antibiotics, tender No. 45. Bids are invited until August 15, which is the deadline indicated by the Ministry of Public Health, Montevideo. Bids must be submitted through an agent or representative established in Uruguay. Bidding instructions, specifications and other pertinent data are also available from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D. C. US Department of Commerce, Bureau of Foreign Commerce Office of Trade Promotion.

Chemical Materials, (liquid chlorine, sulfate of alumina and bleaching powder); tender No. 114/61; August Iraqi Ports Administration, Basra. Bidding instructions, specifications and other pertinent data are also available on loan from the Trade Development Division, Bureau of Foreign Commerce, US Department of Commerce, Washington 25, D. C. US Department of Commerce, Bureau of Foreign Commerce, Office of Trade Promotion.

Paint, Oil, 800 pail. Paint, oil, 1,000 gal. Spec. Fed. TT-P-102, and 2 Class B. Various destinations. Bid IFB-63077-1-62B August 4. Availability of specifications, drawings and specifications exception specifications available at Naval Supply Depot, Attn: Code CDI, Building 26, 5801 Tabor Road, Philadelphia 20, Pa. Drawings and specifications exceptions available at Military Industrial Supply Agency, ATN: Code 7211, Building 36, 700 Robbins Avenue, Philadelphia 11, Pa.

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Epoxy Off-Beat Resins Swinging More Weight in 52-Million-Lb. Mart

Total consumption of modified and unmodified epoxy resins amounted to about 52 million pounds last year, 21 million of which are estimated to have gone into protective coatings, and most of the balance in adhesive, electrical and laminating applications. More than 95 percent of this sales volume is in conventional epichlorhydrin-bisphenol condensates, but an increasing number of off-beat epoxies are becoming available based on diepoxides, epoxidized polyolefins and epoxy novolacs. The first two groups, on the market less than five years, have been arousing greater interest among manufacturers of electrical and electronic equipment due to their admirable mechanical properties at high temperatures and under electrical stress.

EPOXY RESINS SALES TREND

1963 . . .	*80.0 million lbs.
1961 . . .	*55.0 million lbs.
1960 . . .	51.9 million lbs.
1959 . . .	45.2 million lbs.
1958 . . .	30.6 million lbs.
1957 . . .	27.4 million lbs.

*Estimate.

Source: Tariff Commission.

In addition, a great number of curing agents for epoxy resins are commercially available and in some systems, the hardener may be more important in securing desired properties in the end-product than is the resin itself. In general, curing agents for the epoxy group are polyamides, anhydrides, polyphenols or Lewis acids, such as boron trifluoride. The latter are often used in conjunction with other cure systems.

FMC Offers Epoxidized Polyolefins

The "Oxiron" epoxidized polyolefins, first offered by FMC Corporation on a developmental basis last year, are curable through reactive double bond and hydroxyl groups as well as multiple epoxy groups.

FMC recently expanded its epoxy plant at Baltimore, Md., to accommodate commercial production of "Oxiron" resins. The plant epoxidizes olefinic raw materials with hydrogen peroxide utilizing the *in situ* process developed and patented by the company.

Coupled with the expansion, the company instituted price reductions on these products of over 60 percent, making them available in carload quantities at 60 to 80 cents a pound, depending on the particular resin selected.

With further production economies anticipated as demand increases, FMC says the resins are likely candidates for uses in the area bridging the formulation-cost gap between epoxy and polyester materials.

Depending on the curing agent used, epoxidized polyolefins have a density 10-20 percent less than that of conventional resins. This provides an advantage in some structural applications as well as an economic advantage. Use of lower cost curing agents, such as anhydrides, glycols and acids, provides another cost advantage.

Although FMC evinces interest in all standard epoxy resin applications, from adhesives and coatings to stabilizers, the company is concentrating most heavily on specific applications where it is felt that the properties of "Oxirons" give them the nod over other materials.

Company Has New Formulations

For the electrical industry, where an estimated 5 million pounds of epoxies are consumed, FMC reports it is currently considering a couple of improved "Oxiron" formulations which provide very good thermocycling properties.

Also of great interest to the company is the matched metal die preform technique for molding reinforced plastic parts. This process, which has been used to fabricate parts ranging in size from small lamp shades to washing machine tubs and 17-foot boats, has been largely the province of polyester resins.

However, epoxies and other thermosetting resins are used in instances where greater strength, chemical resistance or improved electrical properties are desired.

Reinforced plastic parts are formed by this process through a combination of pressure and heat on the resin and reinforcement of chopped glass fibers. In a preliminary step these two components are combined in a preformed shape.

Novolac epoxies, having a high degree of reactivity, are available and find their widest use in adhesives formulations where they are sold as compounds rather than as resins per se.

Basic ingredients of an adhesive formulation utilizing a product of this type might contain in addition to the novolac, a filler, a flexibilizer and a curing agent.

Fillers may be any one of a number of materials; sand, ground glass, or aluminum oxide among others. However, the natural wood flours, commonly used as filler in many cases, are not applicable in this instance. Hardeners used with conventional epoxy resins are useful in the curing of epoxy novolacs.

Average price of novolac epoxies may range anywhere from 68 cents a pound in carloads up to $1.44 a pound in small packages. Although observers say a fair quantity of epoxy novolac is sold for adhesive use, and there is some consumption in specialty coating and potting compounds, the market is limited due to the high price of these materials, their tendency to be quite viscous and very rigid on cure.

Epoxy Novolacs Available From Borden

Borden Chemical Company markets novolac epoxies under the "Epiphen" tradename. The company offers a half dozen different products which find their way into adhesives, coatings and electrical applications.

Dow Chemical Company has "DEN-438" which the company recommends for use in applications where high temperature performance is required. The trend toward printed circuits has helped boost interest in this type of product, Dow reports. In missile systems, where weight is a big factor, printed circuits have been an area of ever increasing interest.

Diepoxides based on peracetic acid are offered by Union Carbide Chemicals Company under the "Unox" trademark. Last year the company brought on stream a 10-million-pound-a-year plant for the production of peracetic acid derivatives; the peracetic raw material to be derived from acetaldehyde rather than the more conventional hydrogen peroxide-acetic acid starting point.

Ciba Products Corporation makers of "Araldite" epoxy resins, reports the company has two products in development and several more under study which are not based on bisphenol-A. The new products do make use of epichlorhydrin, however.

Ciba recently introduced a low viscosity, modified resin labeled "Araldite DP-310." The modification with a reactive diluent is accomplished during manufacture of the resin, which is recommended for use in adhesives, electrical encapsulating compounds, flooring, laminating and tooling compounds where low viscosity is needed for best impregnation or maximum filler loading.

Mitchell-Rand Manufacturing Company markets "Randac" conventional and modified epoxies. The company also makes available epoxy transfer molding resins

—Continued on page 53

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Essential Oils, Aromatics

Material is said to be moving well for the heart of the mid-summer. No major price changes were reported although firmness continues in California lemon and in lemongrass. Some dealers who have lemon oil are said to be getting as much as $4 per pound for it. Lemongrass is still very scarce on spot and it was heard about the trade that source price had gotten up as high as $4 per pound. Most dealers have discontinued listings on lemongrass. There is some speculation that the sandalwood market is weakening for the first time in many months but spot prices remain at their previously quoted range.

Israel is making an effort to establish itself as a supplier of essential oils—particularly grapefruit and peppermint. Details are printed in these individual paragraphs.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	July 22, 1960
143.52	143.52	143.37	146.14

For Current Prices See Page 11

Essential Oils

Bay—Material continues to move in good volume and the general market continues firm. Puerto Rican material continues at $4 per pound and material from Dominica continues at $4.25 per pound.

Geranium—Algerian material continues to be quoted at $21 per pound and Bourbon material continues to be quoted at $15 per pound.

Ginger—Sales are good, according to reports by essential oil dealers here in the New York area.

As we approach dog days it is interesting to note that ginger is particularly popular in hot weather and in tropical countries.

Not only does it have a pungent taste and a pleasing aroma, but it serves to cool the body. The explanation is thus: Ginger dilates the superficial vesicles of the skin which causes an immediate feeling of warmth.

But then the sweat glands become very active, resulting in increased perspiration. The end result is a pronounced cooling of the skin.

The essential oil ginger is found primarily in the epidermal tissue of the rhizomes. For this reason, the rhizomes must be peeled carefully. In Jamaica, where some of the world's finest ginger is produced, it is grown at altitudes ranging between 2,500 to 3,500 feet.

Material is harvested from January to May—the most productive time being between February and March. The roots are gathered, peeled by hand and then dried in the sun.

Growers try to avoid storing their ginger more than three to four months because of the likelihood of worms damaging the material.

Another worry they have is the likelihood of loss of weight. Temperatures are so high in most of the growing areas that amounts of weight could be lost by excessive evaporation. For those two reasons, growers try to export the material as soon as possible.

Grapefruit—The following information about grapefruit oil is from *Chemical and Rubber*, a publication of the US Department of Commerce, Business and Defense Services Administration.

United States requirements of grapefruit oil until 1961 were supplied almost entirely by Florida as a by-product of its canned fruit and juice industry. The arrival of some grapfruit oil from Israel was reported in May 1960; US imports from Israel in 1960 were shown as 2,600 pounds.

Although small in volume, recent receipts may be a forerunner of regular shipments. A December 1955 dispatch stated that Israel was promoting production of essential oils as part of its chemical and pharmaceutical development.

Jamaica, formerly the sole foreign source of supply, exported 6,500 pounds of grapefruit oil to the US in 1959 and 7,358 pounds in 1960.

Lemon—Prices continue quite firm with limited quantities of material available.

Some dealers who have material are getting $4 per pound.

Lemongrass — Very little material is said to be on spot. A number of essential oil dealers here in the New York area have discontinued listing it.

An unofficial report is that source price is $4 per pound.

Peppermint — Israel is promoting production of essential oils as a part of its chemical and pharmaceutical development and is considering distilling peppermint oil (Mentha piperita). This information is from *Chemical and Rubber*, a publication of th US Department of Commerce, Business & Defense Services Administration.

The report said that although soil and climatic conditions are favorable, labor costs of cultivating the fields have been an adverse factor in competing favorably in world markets.

Sandalwood — Prices continue high at their previously-quoted levels.

Thyme — Red material continues to range between $3.25 and $3.60 per pound and white matrial continues to range between $3.50 and $3.95 per pound. Technical white continues to range between 80 cents and $1.10 per pound.

Aromatic Chemicals

Vanillin—All the material that came into the US during May was from Switzerland. None came in from Canada.

According to the Foreign & Economics Operations Division of the Bureau of the Census, US Department of Commerce, 2,205 pounds was imported. This material was valued at $14,732 and dutied at $2,865.

Geraniol—Sales are reported to be good with prices remaining at their previous levels. The extra grade continues to range between $1.75 and $2.40 per pound; the soap grade continues to range between 90 cents and $1.75 per pound; the standard continues at $1.65 per pound, and the synthetic continues at $1.30 per pound.

This material, which is employed in perfumery for all types of floral aromas, is found in such oils as coriander, verbena, jasmin, geranium, rose, ylang ylang, thyme and oakmoss.

Seeds and Spices

Canaryseed—The market is firming. Moroccan material, 2 to 3 percent, has advanced from its previous price $11.75 per pound, to $12.10 per pound.

Cassia—During the two-week period ending July 14, 38 lots, containing 3,670 bales of cassia were detained at the Port of New York by the Food & Drug Administration.

Prior to that, during the two week period ending June 30, 76 bales were detained, and during the two-week period ending June 16, 8 lots, containing 2,213 bales were detained.

Celery—French material has advanced from its previous price, 33 cents per pound to 36 cents per pound. Indian material has advanced from 22½ cents per pound to 25 cents per pound.

Coriander — For the two-week period ending June 16, the Food & Drug Administration at the Port of New York, detained 200 bags of coriander seed .

Cumin Seed — During the two week period ending July 14, the Food & Drug Administration detained at the Port of New York, 91 bags of cumin seed.

Ginger—The Food & Drug Administration detained, at the Port of New York, 100 bags of ginger during the two-week period ending July 14. During the two-week period ending June 30, 5 lots containing 665 bags were detained and during the two-week period ending June 16, 103 bags were detained.

Mace — During the two-week period ending July 14, the Food & Drug Administration detained at the Port of New York, 2 lots of mace containing 44 cases. During the two-week period ending June 30, 2 lots containing 49 cases were detained.

Nutmegs—The Food & Drug Administration detained at the Port of New York 6 lots of nutmeg containing 627 bags of nutmegs during the two-week period ending July 14. During the two-week period ending June 30, 2 lots containing 532 bags were detained and during the two-

Essential Oils

week period ending June 16, 7 lots containing 1,291 bags, were detained.

Pepper — The market is generally weaker. Both Malabar and Lampong black have dropped from their previous price, 46c. per pound, to 45½c. per pound.

Muntok white has dropped from 56c. per pound to 55c. per pound.

For the two-week period ending July 14, the Food & Drug Administration at the Port of New York detained 21 lots o. black pepper containing 3,146 bags. Prior to that, during the two-week period ending June 16, 6 lots containing 1,360 bags were detained.

Essential Oil Briefs

CHEMICAL LURES MOTHS: The first large-scale field trials of "Gyplure," a synthetic attractant for gypsy moths, are under way on Long Island and in New England, according to the US Department of Agriculture. "Gyplure" is man-made chemical that supposedly attracts male gypsy moths as effectively as the natural attractant possessed by females of this species. The tests now in progress will help determine the future usefulness of "Gyplure" in preventing gypsy-moth matings; detecting new infestations of the pest at an early stage; and possibly in trapping and killing the insect in sufficient numbers to cause a worthwhile reduction in gypsy-moth populations.

The scientists want to learn whether "Gyplure" will confuse the male moths enough to keep them close to the ground or on tree foliage and away from the females, which do not fly and usually stay on tree trunks.

HEXACHLOROPHENE FACTS: The Sindar Corporation has recently published a technical bulletin about their G-11. Entitled "Methods of Analysis for the Quantitative Determination of G-11 (Hexachlorophene USP)", the bulletin includes a description of titrametric determination, colorimetric determination and ultraviolet determination.

UK's Drug Savings

—Continued from page 7

have come in on the ministry's first invitation to non-licensed manufacturers of leading drugs.

He refuses to say how large a reduction in prices the bids represent, but expects contracts to be in force by September.

Under the new controversial scheme, the ministry will buy drugs on contract from any supplier whether licensed or not by the British patent holder.

The Ministry would negotiate a direct royalty payment with the patent holder. The first drugs chosen for bids on the new scheme were all primarily the products of American-owned firms in Britain. Mr. Powell says this is a coincidence.

Germany Puts

—Continued from page 8

the manufacturer has been granted a license in the country of origin.

The labeling on patent medicines must include: name and address of manufacturer or distributor; designation of drug; registration number; content in weight, volume, or pieces; form of administration; method of application (in German); active constituents as listed in the German Pharmacopeia, otherwise by scientific designation, with quantities in usual measuring units; if subject to prescription, the legend "Verschreibungspflichtig" (prescription required); if sale authorized by pharmacy only, the legend "Apothekenpflichtig" (pharmacy only); and for perishable items, date of expiration.

Patent medicines imported commercially must be marked in addition with the name of the distributor.

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Obituaries

Lord Harry Duncan McGowan

Lord Harry Duncan McGowan, retired board chairman of Imperial Chemical Industries, Ltd., of Great Britain, died July 14 in London. He was eighty-seven years old.

A self-made man, Lord McGowan rose from a working class background to a peerage and the top post in Britain's largest chemical company.

In 1926 he helped establish ICI through amalgamation of the Nobel Company, of which he was managing director, and all principal munitions companies in the United Kingdom. He became chairman in 1930 and retired in 1950, continuing as honorary president until his death.

R. K. Turner

R. K. Turner, who was named a vice-president of Union Carbide Corporation earlier this month, died July 18 in Larchmont, N.Y. He was fifty-nine years old.

Mr. Turner had been with Carbide since 1924 when he joined Union Carbide Chemicals Company at Clendenin, W. Va. He moved to Union Carbide Plastics Company in 1952 as vice-president and was appointed president of that Carbide Corporation division in 1957.

Michael J. Archbold, director of professional relations and manager of milk products of Borden Company's pharmaceutical division, died July 20 in New Hyde Park, N. Y. He was fifty-four years old.

Samuel Blashow retired sales representative for McKesson & Robbins, Inc., in Westchester County, N. Y., died July 13 in New York. He was seventy-nine years old.

Jack William Eric Jespersen, chief chemist of Northam Warren Corporation, died July 19 near Stamford, Conn. He was forty-two years old.

David P. Palmer, research chemist with Bristol-Myers Products Company, died July 20 in Newark, N. J. He was fifty-nine years old.

Ralph Omer Rhoades, who retired last October as board chairman of Gulf Oil Corporation, died July 19 in New York. He was sixty-five years old.

Lyell Bryant Robinson, chairman and director of several British metals and smelting companies, died July 16 in London. He was fifty-eight years old. Mr. Robinson was chairman of Broken Hill Associated Smelters, Ltd., Broken Hill Corporation, Ltd., and Consolidated Zinc Corporation.

Railroads Given Permission To Boost Pick-Up Charges

Railroads serving the eastern section of the country were authorized to modify their charges for pick-up and delivery services to collect about $7 million in additional revenues annually from shippers.

The increases of varying amounts and at varying locations were authorized by the Interstate Commerce Commission last week in an order revoking a suspension of the tariff schedules that have been on file since last December.

The carriers were authorized to put their new rates and charges into effect beginning last Saturday (July 22).

Sodium Chlorate Unit

—Continued from page 8

will be supplied from the Canadian unit until the Lake Charles plant is placed in production.

Sodium chlorate is finding heavy tonnage use as a defoliant and in uranium ore processing. Chlorine dioxide, which is finding increasing markets in the pulp and paper industry to attain extra brightness on paper products, is produced from sodium chlorate.

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Coating Materials

Weakening in the listings for benzene and reports of some shading in the phthalic anhydride market may spell some trouble for the producers of the phthalate esters. That is the report from one usually informed trade source last week. Despite the rough days ahead for the esters he feels that the ester prices should hold for the remainder of the year. A quick check of the ester producers last week found all of those contacted reporting listings of the esters unchanged.

While there is an apparent slight surplus of phthalic on the market, another possible weak spot in the esters is in regard to the alcohols. Reports indicate that with many new plants coming on stream, the possibility of an over-supply in this market could result in another rash of price cuts.

Demand for the phthalate esters is reported to have picked up in the last few weeks after the annual time-out for vacations. Rising level of business has not eased the stiff competition between producers, one trade source reports.

Elsewhere in the coatings market, demand and prices are basically unchanged from previous weeks. Prime pigments moved in adequate volume to please most producers.

Shellac markets were active but quiet for the week. Prices remained unchanged.

Vacation shutdowns in consuming industries has caught up to the casein market, sources report. Listings, for the week were unchanged from previous weeks. Traders report that mills were absent from the market.

Offers of French casein were made at slightly lower levels than in previous weeks. Some quotations at 17¼ cents, many under 17¾ cents, were reported during the week. These prices however, are subject to export licenses for approval.

Australian casein for the coming season is said to be already heavily committed. Approximately 5,000 tons are reported to be contracted for to all consuming nations in advance of production. Of the 5,000 tons, Japan is said to have taken 3,500 tons.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	July 22, 1960
104.71	104.71	104.55	103.14

For Current Prices See Page 11

Prime Pigments

Antimony Oxide — Basic market situation remains unchanged. Listings remain split with producers reporting that demand for the oxide is at very good levels.

Cobalt Oxide — Consumers presently working unusually high level of stocks built up a few months ago. Traders find the market very routine with some change of improvement in the next few weeks as consumers return to the market to replenish needs.

Chrome Colors — Chrome oxide green (C.P.) production during May hit 366 short tons as against 322 short tons during the same month last year. Stocks were also higher. At the end of May, the Census Burau reported stocks of chrome oxide green at 591 short tons or an increase of 125 short tons in the previous thirty days.

Output of chrome yellow and orange during May decreased about 200 short tons from the level reported for the previous month, according to the Census Bureau. At 2,209 short tons in May, this was about 300 tons greater than the production level for May, 1960.

Stocks of chrome yellow and orange held at approximately the same levels for the two month period May-April. At the end of May, stocks of yellow and orange held at producers' plants at the end of May were reported at 591 short tons.

Output of molybdate chrome orange was higher in May but stocks were correspondingly higher, or May, production was set at 736 short tons, compared to 629 short tons during the previous month, while for the same months a year earlier production was reported at 544 short tons.

Stocks of molybdate chrome orange at producers plants at the end of May were reported at 842 short tons as compared to 663 short tons at the end of April.

Lead Pigments—Business continues on the routine side with stocks and listings reported to be unchanged from previous weeks.

Titanium Dioxide—Census reports that production of titanium dioxide (pure and composite) during May hit 45,716 short tons. This was nearly 4,000 tons greater than the output for the previous months and about 3,000 tons over the level reported for the same month last year.

Despite the increase in production, stocks held at producers' plants held at about the same levels during May. Census reports that stocks of titanium dioxide were at 67,287 short tons, only marginally higher than the 67,090 short tons on hand at the beginning of the month.

Zinc Oxide — Reports from the trade indicate that there has been some slight improvement in zinc oxide sales in the past month. Basis of firming in the market is the recent rise in exterior painting activities. Overall market situation remains basically unchanged. Prices, supplies are holding in their longstanding position, according to the latst reports from the industry.

Lacquer Materials

Cellulose Butyrate/Acetate — Market holds to the same basic pattern that has been its main characteristic in the last few years: prices stable, demand steady, supplies adequate.

Nitrocelluose—Operations moving along at an adequate pace. Prices reported to be firmly established, with no change in the market apparent in the last few weeks.

Plasticizers—The recent price reduction of 3c. a gallon on benzene and reports of shading on phthalic anhydride does not sound too promising to producers of the phthalate esters. A quick check of producers last week found producers stoutly denying any change in their ester listings. Trade sources indicated the market would bear some watching in the next few weeks to see if any persistent trends will be established.

The market for the esters is reported to be picking up somewhat in the last week. As reported earlier, many plants were closed for vacations during the first two weeks of July.

Miscellaneous

Paint on masonry surfaces has been shown to withstand the elements better when applied over coat of a new isocyanate primer-sealer base that was recently tested by the US Naval Research Laboratory.

Due to the wide variety and conditions of masonry surfaces, water-base paints used with customary sealants have not met with unqualified success. The new paint-sealer, US Naval Researchers find, contains a commercially available material of the isocyanate type that shows promise as a base for acrylic emulsion paints.

It is described as a free-flowing, penetrating liquid. Upon evaporation of a solvent, the solid isocyanate reacts with atmosphere moisture and ultimately cures to a tough, resinous film. Spot tests at the Naval Research Laboratory showed the film had outstanding adhesion qualities after one year.

An all-purpose mixture of components listed in the report, when brushed on will cover approximately 350 square feet per gallon, the USNRL asserts.

The report (An Isocyanate Primer-Sealer for Masonry) is available at 50 cents per copy, through the Office of Technical Services, Business and Defense Services Administration, US Department of Commerce, Washington 25, D.C.

Asbestos—World production of asbestos was 7 percent higher in 1960 than in 1959, according to the Bureau of Mines. Production in Canada increased 6.5 percent and the estimate for Russian production indicated an increase of 10 percent.

Production in the US was nearly the same as in 1959, according to producers' reports to the Bureau of Mines. Domestic

Coating Materials

sources supplied 6 percent of US requirements of asbestos. Imports of low-iron chrysotile from Southern Rhodesia declined but imports from British Columbia increased in 1960.

US production of asbestos in 1960 totaled 43.653 million short tons and was valued at $4.918 million. Imports of asbestos hit 669.495 million short tons and was valued at $63.345 million.

Naval Stores

June production of gum naval stores totaled 18.570 barrels of turpentine and 51,840 drums of rosin, according to the Crop Reporting Board. This was about 10 percent more than gum still output during June a year ago, and brought production for the first three months of the crop year to 24 percent above the level of the same months last year.

Wood turpentine production during June was 5 percent less than for the previous month. Tall oil rosin production of 42,760 was a record high for any month while steam distilled rosin down to 90,880 drums, the lowest level since June 1958.

Total stocks of turpentine on June 30, 1961 were slightly lower than a month ago but stocks of gum and wood rosin were higher.

Production of dipentene in June totaled 2,020 drums (520 pounds per drum) and brought the total output for the period April 1 to June 30 to 5,370 drums. This was almost 1,000 drums lower than the output for the same months last year.

Coating Material Briefs

BOOKLET OFFERED: A new technical booklet, which is reported to be the first to provide information on cast polypropylene films, is being offered by Hercules Powder Company, Wilmington, Del. The twelve-page booklet is divided into four main sections: markets, properties, converting and packaging. Technical data includes typical property ranges of "Profax" polypropylene film and a table which compares competitive films. The processing section includes forty charts.

DISPOSABLE SYRINGE: Processing of hypodermic syringes for re-use can be eliminated by a new disposable unit manufactured by Roehr Products Company, Inc., Deland, Fla. Reported to be inexpensive, the disposable syringe minimizes the danger of cross-infection for both patient and operator because of the unit's one-time use. Critical parts of the syringe are made from "Escon" polypropylene, a product of Enjay Chemical Company, N.Y.

SHERWIN-WILLIAMS' LATEST: Three new improved yellow pigments are being offered by Sherwin-Williams Company, N.Y. The three new "Regent Yellows" are described as chrome yellow pigments with considerably improved lightfastness and alkali resistance over regular chrome yellows.

They are recommended for all exterior uses including trade sales items, such as trim paints and tinting systems, automotive, truck, bus and farm equipment finishes and industrial enamels and lacquers.

Kefauver Drug Bill

—Continued from page 3

stand of the AMA on the bill came early in the hearings from two members of the AMA Council on Drugs—Dr. Charles D. May, professor of pediatrics at New York University Medical Center, and Dr. Louis S. Goodman, head of the pharmacology department of the University of Utah College of Medicine.

A former council member—Dr. David P. Barr, president and medical director of the Health Insurance Plan of Greater New York—likewise contradicted the medical association.

Supporting testimony for the Kefauver bill also came during this series of hearings from four physicians who had appeared before the committee previously to criticize practices of drug manufacturers and to endorse the committee's investigation of drug prices last year. They are:

Dr. William B. Bean, professor of internal medicine of the Iowa State University School of Medicine; Dr. Louis Lasagna, head of the division of clinical pharmacology of John Hopkins University; Dr. Harry F. Frank Dowling, head of the department of medicine of the University of Illinois, and Dr. Walter Modell, associate professor of pharmacology of Cornell University Medical College.

The hearing is to continue tomorrow (July 25) with Dr. Maxwell Finland, associate professor of medicine of the Harvard Medical School, as the witness. Committee plans beyond this date are uncertain.

Dr. May testified that a "disturbing proportion of pharmaceutical promotion cannot be accepted as a trustworthy means of bringing accurate information on health products to physicians."

He said that "if we are going to permit free promotion of drugs released to the market, let's at least empower the FDA to make certain only drugs of reasonably demonstrated usefulness are placed at the physicians' disposal."

Dr. Goodman said he could not understand the AMA opposition to provisions of the bill giving the Food & Drug Administration authority to test drugs for "efficacy" because the leadership never consulted the fourteeen-member Council on Drugs, which is the advisory group supposed to know most about the actions and uses of drugs.

"The AMA deserves credit for having experts on its council," he said. "I only wish they would make use of us."

Dr. Barr advocated increased federal authority over the industry to correct these situations:

- Introduction of drugs before their usefulness is established and withholding full information on dangerous reactions.
- Extravagant advertising and promotion.
- Confusion in generic names.

He said that it is obvious to all that reform is necessary, although he agreed with AMA's position that the judgments of the general practioner is essential in determining both dangers and usefulness of drugs.

Nuodex Names Amica Agent For South Florida Territory

Amica Division of F. H. Ross & Co. has been appointed by Nuodex Products Division of Heyden Newport Chemical Corporation as sales representative to the protective coatings industry in southern Florida. The appointment is effective August 1.

Amica has its headquarters and warehouses in North Miami Beach, Fla. Frank V. Allen, branch manager, will handle the Nuodex line.

R. T. Hopkins Company, Atlanta, Ga., will continue to represent Nuodex in South Carolina, Georgia, Alabama, and the northern and central sections of Florida.

Urea Contract Awarded

Poland has awarded a contract for the first of five scheduled urea plants under its new five-year plan. Power Gas Corporation, a subsidiary of the British Davy-Ashmore engineering group, received a $4.2 million contract for a 500-ton-a-day unit using the Toyo Koatsu process licensed from Japan.

Trade Name Chemicals

—Continued from page 49

in addition to the conventional liquid resins for casting and potting under the "Randac" tradename.

Epoxy molding materials, although not new, have been finding use with electrical component manufacturers because of their ease of molding at low pressures.

Another group of epoxide materials, the epoxidized vegetable oils, have come into widespread use as a result of the discovery that they could be used as plasticizer-stabilizer in vinyl resins.

These products are usually used as secondary plasticizer in the amount of 5 to 10 parts per 100 parts of resin. A barium-cadmium-zinc stabilizer is also incorporated to give a greater margin of heat and light stabilization where high processing temperatures are used, or end-use application requires the added protection.

Trade Name Briefs

ANTIOXIDANTS: Universal Oil Products Company is dropping prices on some of its tradename antioxidants 10 cents a pound, effective August 1. Products involved are "UOP 88," "UOP 88-S," and "UOP 288." New truckload price, delivered East of the Rockies, will be 94 cents a pound; 2,000-lb. lots, 95 cents; and drum quantities, 97 cents a pound. Prices West of the Rockies will be 2 cents a pound more.

WAXES: Polyvinyl Chemicals has published a technical bulletin, "W-24," revealing details of the company's new acid soluble and acid dispersible acrylic copolymer emulsion for floor polishes OPD, 7/17/61). Designated "Neocryl A-400" and "A-410," the products are not affected by water, soap or alkaline detergents, yet can be easily removed with mild acid cleaners.

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Oils, Fats and Waxes

Buying interest in oils and fats lagged last week, the market reflecting the summer doldrums. Lack of interest in edible oils combined with easier trend in futures unsettled this group, while industrial oils ruled steady at unchanged prices. Soybean, cottonseed, and peanut oils were inactive and fractionally lower. Crude coconut oil also was quiet and easier, declining fractionally for prompt and later delivery. Copra was quiet and nominal. Olive oil on spot was weak and dropped 5 cents per gallon because of lower shipments from Spain.

Lower cost of vegetable oils was reflected in shortening and producers reduced prices 1 cent per pound.

Weak tone continued to dominate tallow and grease and favoring buyers. Trading was spotty and took place at ⅛ cent less compared with about ½ cent decline the week previous. Offerings were not pressing, but lower bids were accepted. Export interest was fair and short covering was noted at lower levels.

Industrial oils remained at unchanged prices, despite the usual dull summer business. Tung oil remained strong at the recent price gains, reflecting the firmness of surplus government held oil. Linseed oil was strong with the renewed strength of flaxseed. Oiticica oil also was well held as were castor and rapeseed oils. Crude menhaden oil was inactive with sellers and buyers ½ cent apart. Menhaden oil production was moderate as fishing was fair to good in the Gulf and spotty on the Atlantic coast.

Soybean and linseed meals were easier and declined $1 per ton. Cottonseed and peanut meals were scarce and small lots were moved at premiums.

Price Trends

Advanced

Carnauba wax, yellow, 3c. per lb.

Reduced

Carnauba wax, Ceara, No. 3, crude, 2c. per lb.
Parnahyba, 2c per lb.
Coconut oil, crude, ½c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ⅛c. per lb.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Greases, ⅛c. per lb.
Linseed meal, extracted $1 per ton.
expeller, $2 per ton.
Olive oil, spot, 5c. per gal.
Peanut oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Soybean meal, $1 per ton.
Soybean oil, crude, ⅜c. per lb.
Refd., ⅜c. per lb.
Tallow, ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	July 22, 1960
112.28	113.08	109.16	107.37

For Current Prices see page 11

Vegetable Oils

Castor—Steady tone prevailed despite quiet demand, the market reflecting the strength of replacements. No. 1 Brazilian oil was firmly held at 17¾c. to 18c. per pound, tankcars, New York, prompt delivery, according to seller. Domestic grades were unchanged and steady.

Preliminary estimate of the 1961 Brazilian castor bean crop is indicated from 90,000 to 100,000 tons compared with the record of about 120,000 tons in 1960 it was reported by the Foreign Agricultural Service. The castor bean harvest in Bahia, where one-third to one-half of the country's crop is produced is expected to be small because of insufficient rain.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	2,944,000
Previous week	.....	1,000,000
Corresponding week, 1960	165,000	1,916,000
Total this year	.....	46,254,000
Corresponding week, 1960	3,342,450	52,460,000

Coconut—Business was slow. Shipments were easier. Prompt shipment was quoted at 11½c. per pound, tankcars, f.o.b. Pacific coast. The New York market was quiet and nominal at 12⅜c. to 12½c., tankcars, f.o.b. prompt delivery.

Corn—Trading was quiet. Crude was slightly lower, with sales at 16c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was quoted at 19.73c., tankcars, New York basis.

Cottonseed—Futures market was an irregular and narrow affair last week, lacking new feature. Trading was light and professional with trade interests on the sidelines. Cotton crop news was unfavorable because of rains and insect damage. Demand for cash oils was inactive. Refined was lower with cheaper crude. Export business was light. Israel bought 500 tons of cottonseed oil. Refined salad was quoted 16¾c. per pound, tankcars, New York, prompt delivery. Crude oil was lower and nominal at 13c. per pound, tankcars in the Valley; 13⅛c., southeast and 12¾c., Waco, prompt delivery.

Oiticica—Improved demand was reported chiefly due to the higher cost of linseed and tung oils. Tankcars were firm and moved at 14¼c. per pound, New York, prompt delivery. Drums ranged from 15¾c. to 16¼c., spot, according to quantity.

Linseed—Strong undertone continued in this market, reflecting renewed strength in flaxseed. Demand from paint manufacturers was limited to spot cars for nearby needs, withdrawals against existing contracts at a healthy rate. Raw linseed oil, in tankcars, f.o.b., Minneapolis, was held at 15½c. per pound, July-September delivery; 15.70c., October-December, same basis and 16.58c., f.o.b. New York.

Olive—Quiet demand created an easier tone in replacements and sales were reported at lower levels. Spanish oil ranged from $51 to $52 per 100 kilos, drums, f.o.b. ports, August-September shipment, with trading reported on this basis. Tunisian oil was merely nominal around $57, per 100 kilos, c. and f. New York. The local market was quiet and easier. Light sales were noted at $2.30 to $2.40 per gallon, exwarehouse, depending upon quantity.

Peanut—Light sales were noted in crude at 15⅝c. per pound, tankcars, f.o.b. mills, off ⅛c. Refined oil was lower at 18⅞c. tankers, New York basis.

Soybean—This market fluctuated sharply with soybean futures. Crude dropped sharply to 10½c. per pound tankcars, f.o.b. mills, unrestricted, July shipment. Refined salad was quiet and held at 12⅞c. per pound, tankcars, New York, prompt delivery.

Poland's agreement for the purchase of 50,000 tons of soybean oil is expected to be signed this week and Greece was in the market for 5,000 tons.

Tung—Strong tone continued in this market. Prices were unchanged and firm. Offerings were scarce and tankcars were maintained from 28c. to 28¼c. per pound, New York, prompt delivery, depending upon seller. Buying was restricted to prompt needs. Drums were unchanged ranging from 29½c. to 29¾c. per pound, spot, as to quantity.

CCC sold 60,000 pounds of tung oil at 17.67c. per pound, bulk, f.o.b. Marrero, La., and 120,000 pounds at 27.63c. and 27.676c., same basis for unrestricted use last week. Bids were received for 540,000 pounds. Previous sales were made at about the same levels.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, July 21, follow:

	Sales	High	Low	Close
		Cents per Pound		
Sept.	357	13.99	13.70	13.99 S
Oct.	28	13.77	13.51	13.65@13.70
Dec.	153	13.63	13.46	13.56 S
March	59	13.75	13.56	13.65@13.68
May	32	13.75	13.62	13.60 Bid

Total sales and switches, 629 contracts.

Miscellaneous

Cocoa Butter — Trading was slow. Prices ranged from 54c. to 59c. per pound, spot, depending upon quantity.

Copra—Market was quiet and more or less nominal at $155 per ton, c.i.f. Pacific Coast.

Flaxseed—Wide fluctuations occurred in cash flaxseed, closing 5c. higher. Cash bids followed futures quotations closely, easing early on widespread rainfall in the Northwest but advancing again on unfavorable crop reports. Rains were too late to help much of the early seeded flax. Winnipeg futures scored most spectacular gains and Minneapolis July advanced the 15c. limit last Wednesday. Cash flaxseed was $3.80 bid a bushel, spot and to-arrive,

Oil, Fats and Waxes

Minneapolis. Sizable flurry of activity occurred in to-arrive bookings ahead of early decline. Offerings in the spot market were virtually nil.

Flaxseed crushed in June totaled 1,586,866 bushels bringing the 11-month August-June total this season to 17,751,000 bushels.

Fats and Greases

Greases—Market continued unsettled. Light volume of sales was reported at ⅛c. per pound lower. Choice white ranged from 7c. to 7⅛c. per pound, tankcars, delivered and yellow at 5½c., same basis.

Lard—This market was irregular and slightly lower. Cash lard was quoted at 9.175c. per pound, drums, Chicago.

Tallow—Easy tone continued and moderate trading was noted at ⅛c. lower for all grades. Offers were light but lower bids were acceptable. Soapers took fair sized lots at the decline. Export business was fair. Yugoslavia bought 1,500 tons of fancy and was in the market for the same quantity. Bleachable fancy was sold at 5⅞c. per pound, tankcars, delivered; prime was available at 5¾c.; special 5⅝c.; guaranteed fancy, sold at 6¼c. and No. 1, 5½c., same basis.

Cake and Meal

Cottonseed Meal—Supplies were scanty in the southeast and Valley and limited demand was being filled by shipments from Texas on the basis of $72 per ton, Atlanta sacked for 41 percent meal.

Linseed Meal—Demand for linseed meal was dull, confined to single cars for nearby and prices dropped $1. Advances in flaxseed injected bullishness but formula feed manufacturers held purchases to needs for a week or two ahead. Sales and directions were seasonally slow, reflecting reduced demand for cattle feeds. Re-sale offerings were available at 50c. under crusher quotes of $56.50 a ton for extracted meal, 34 percent protein, bulk, carlots, f.o.b. Minneapolis. Old process meal dropped $2 to $62.50, July-August.

Soybean Meal—Prices followed an irregular path in this market, scoring gains of 50c. to $1 in western areas while unrestricted billing and eastern trunk line dropped 50c. to $1.50. Excellent demand prevailed in Minnesota, Iowa and Wisconsin and production was curtailed. Formula feed manufacturers were aggressive buyers as a result of material pickup in turkey feeds. Unrestricted meal, 44 percent, was quoted $65 per ton, prompt delivery.

Waxes, Vegetable

Feature of this market last week was the strength of yellow carnauba which was boosted 3c. per pound on spot, because of the sold up condition of the Brazilian market and scarcity of supplies on the spot. Light stocks of No. 1 Ceara were lifted 3c. to 87c. and 88c. per pound, spot delivery and No. 1 Parnahyba to 90c. to 91c., depending upon seller and quantity. While yellows were higher an easier tone prevailed in fatty grades due to quiet demand and increased selling pressure. No. 3 Ceara declined 2c. to 57c. to 58c. per pound, spot and No. 3 Parnahyba to 90c. to 91c., as to quantity. This reduction brought prices in the local market below the cost of replacements from Brazil. The primary market remained steady because shippers expected higher floor prices to be announced in a few days.

Salk Vaccine Advance Reported by Australia

A more powerful version of the US Salk anti-polio vaccine is being developed at the Commonwealth Serum Laboratories in Melbourne, Australia.

The vaccine is expected to raise the protection rate for immunized people from 90 to 95 percent, according to the Canadian Department of Trade & Commerce. Clinical tests will begin in a few months and mass doses are expected to be available within a year.

Grace Elevates Tilton

R. L. Tilton has been elevated to general sales manager of the nitrogen products division of W. R. Grace & Co. From nitrogen products division headquarters in Memphis, Tenn., he will direct all sales of ammonia, urea and solutions.

Plax Buys 15-Acre Site For Plastic Container Plant

Plax Corporation, producer of plastic film, sheet and containers, has bought about fifteen acres of land in Yardville, N. J., for an expansion of its blow-molded plastic container activties.

The company will put up a one-story producing unit of approximately 146,000 square feet and expects to have it on stream this fall. Engineer-contractor for the project is Mahony Troast Construction Company, which sold Plax the acreage.

Plax produces "Polyflex" oriented polystyrene film and sheet for packaging uses as well as a complete line of plastic containers ranging from small vials to fifteen-gallon carboys.

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Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Colton 4½ T.
Stokes R single punch & RD1 rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T CO.

107 8th St., Brooklyn 15, New York
STerling 8-1944

FOR THE BEST IN USED EQUIPMENT

1—J. H. Day 3-roll high speed Mill.
1—J. H. Day 5-roll high speed Mill.
6—Blackburn-Smith Pressure Leaf Filters, jktd.
2—Rotary double tube Crystallizers.
1—Copper Evaporator, jacketed, 250 gal.
4—U. S. Hoffman Pressure Leaf Filters, jkted.
Conical Dry Mixer 192 cu. ft. vol.; 125 cu. ft. opr. vol.; with 15 H.P. Unibrake Motor.
4—Werner & Pfleiderer 200 gal. jktd. sigma blade Shredders.
2—Ball & Jewell #2 Cutters.
4—Link-Belt Vibrating Screens 4' x 8'.
1—Jeffrey Vibrating Conveyor.
1—30" Sperry Filter, closed del., 3-eye, 39-plates, 40-frames.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor.
1—Abbe Pebble Mill 5' x 22'.
1—Sparkler Filter 33-S-28, with Scavenger Plate, steam jacketed, like new.
1—2 qt. Sigma Blade S.S. Mixer.
1—Patterson Steam Jkt. Ball Mill 42" x 36".
1—430 S.S. Tank 3000 gal. vert. ⅜ plate.
2—Vacuum Pumps, Gardner-Denver, 5" bore, 4" stroke, with 7½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers, 120 gal. jkt.
1—Aetna Water Still, 20 gph—new.

Large stock of new and used H.P. Boilers, Tanks, Pumps, Heat Exchangers, Freon Compressors, Stainless Steel & Brass Valves.

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OUTSTANDING MACHINERY-RIGHT NOW! WHEN YOU NEED IT!!

3—300 gallon aluminum kettles, jacketed.
1—3500 gallon vertical glass lined tank.
2—Allis Chalmers 30"x28"-7 deck gryatory sifters.
1—F. J. Stokes 8 shelf vacuum shelf dryer, 40"x44".
3—Alsop model SD-8-WR-20 type 316 stainless steel portable filters with pumps.
2—Patterson style D burrstone lined pebble mills, 400, 250 gallons.
1—40" rubber lined suspended centrifuge.
1—Blaw Knox 50 gallon type 304 stainless steel jacketed autoclave, 4000 PSI internal, 450 PSI jacket, agitated.
2—Stokes rotary vacuum dryers, 2½' x8', 18"x42".
1—Hersey 1½'x16' steel hot air rotary dryer.
5—3 roll high speed mills, 14"x30", 9"x24", 6"x14", 5"x12".
5—Stokes tablet presses models RB-2, DS-3, RD-3, R-1, T-5.

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chemical & process machinery corp.
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BUY IT NOW!

Raymond High Side 50" Mill.
Sharples C-27, Super D Hydrator, 316 S/S.
Fletcher Centrifuge, Suspended 48" dia.
Bird Centrifuge 18" x 28", 316 S/S.
Bird 40" x 60" Solid Bowl Continuous, S/S, UNUSED.
Sweetland Filters #7, #12.
U.S. Auto Jet Self-Cleaning Filter 54".
Oliver Precoat Filters 5'3"x10 & 8'x14'.
Swenson Evaporators 3625 & 5780 sq. ft.
Pfaudler 100 gal. glass lined Jacketed Reactor.
Spray Dryer S/S, Lab & Production Sizes.
Link Belt Dryer, Roto Louvre, 604-24, 316 S/S.

Link Belt Rotorary Dryers 8' x 40'.
Aluminum Tanks 2000 gal.
Orville Simpson Rotex Screens S/D, D/D, T/D.
Simpson 40" Porto Muller.
Vibrating Screens, 5x12, 4x10, 4'x8', 3x6.
Double Cone Blender, S/S, 80 cft.
Sweco Separator 48" S/S.
Exchangers and Condensers 500 to 4000 sq. ft.
Petro Chem Furnace 1,000,000 BTU, UNUSED.
3—250 ton York Refrigeration Compressors.

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ECONOMIZE DOLLARWISE

1—Bird 40" x 60" SS horizontal cont. Centrifuge. 50 HP motor.
2—Day #4 Gearless type Pony Mixres. 80 gal cap. 10 HP motor.
1—Sepore 250 ton hydraulic Laminating Press. 8 steam heated 34" x 38" platens. 27" daylight. Pump.
2—Sharples D-2 SS Centrifuges. Separator bowls. 7½ HP Mtrs.
1—Baker-Perkins 50 gal SS heavy duty Sigma Blade Mixer. Jcktd. Vacuum cover. 7½ HP motor.
3—8' x 40' rotary Flame Dryers. ½ shell. Inter-cellular constr. End enclosures, Fans & Cyclones.
1—Gayco 4' Mechanical Air Separator. Model 38.
1—Raymond #1 auto. Pulverizer. With Raymond 5' single Whizzer Separator.

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2 CHEMICAL PLANT SALES

Niagara Falls, N. Y. • Everett, Mass.

STAINLESS COLUMNS

78"x18'x1/4" Vulcan 318 SS Bubblecap, 14 trays, 180 caps/tray, 50 PSI.
72"x30'x1/8" Budd 347/SS Bubblecap, 21 trays, 38 caps/tray.
48"x41'x5/16' Vulcan 316 SS Bubblecap, 40 trays, 70 caps/tray, 100 PSI.
36"x21'x1/4" 316 ELC SS Packed, 15 PSI.
36"x20'x3/16" 316 SS Packed, 100 PSI.
14"x17'6"x1/8" 316 SS Packed.
12"x18'8"x3/16" 347 SS Packed, 180 PSI.

COLUMNS

20"x27' GLASS LINED 50 PSI full vacuum.
16"x21' GLASS LINED Scrubber.
16"x10' GLASS LINED 25 PSI full vacuum.
84"x25'x3/8" Steel 8 Bubblecap trays.
60"x68'x5/16" Steel 35 Bubblecap trays.
36"x58'x5/16" Steel 35 trays with Reboilers.

REACTORS

Pfaudler 500 gal. ELL Gl. Lined Jktd. Agit.
Dopp 1000 & 1790 gal. Ni-Resist Jktd. Agit.
Vulcan 1000 gal. Everdur Coiled, Agit.
Patterson 1000 gal. Steel Jacketed.
Buflovak 900 gal. Stainless Agit. Elec. Heat.
Patterson 500 gal. Steel Jktd. Agit. 2 HP.
Alloy Tank 750 gal. Stainless Pressure Still.
Alloy Tank 300 gal. Stainless Pressure Still.

STAINLESS HEAT EXCHANGERS

2320 Sq.ft. 33"x21'-1"x16ga.x16' Tubes.
1000 Sq.ft. 27"x168"-3/4"x16ga.x14' Tubes.
893 Sq.ft. 22"x20'8"-5/8"x16ga.x14' Tubes.
800 Sq.ft. 23"x17'10"-3/4"x16ga.x16 Tubes.
615 Sq.ft. 22"x15'9"-5/8"x16ga.x10' Tubes.
420 Sq.ft. 18"x9'6"-3/4"x18ga.x8' Tubes.
300 Sq.ft. 14"x19'6"-3/4"x18ga.x12' Tubes.
235 Sq.ft. 16"x8'3"-5/8"x16ga.x7' Tubes.
188 Sq.ft. 11"x16'8"-5/8"x14ga.x12' Tubes.
146 Sq.ft. 11"x14'-5/8"x16ga.x9'6" Tubes.
68 Sq.ft. 8"x17'3"-3/4"x16ga.x16' Tubes.

CENTRIFUGES—FILTERS

Sharples C-27 Super-D-Hydrator Stainless.
Sharples C-20 Super-D-Hydrator Stainless.
30" Susp. Centrifuge-Imperforate Stainless.
Sharples #6 Super Centrifuge SS Bowl.
5'3"x3' Oliver Precoat Rot. Vac. Filter SS.
4'x1' Bird Young Rot. Vac. Filter Stainless.
36"x24" Goslin Rot. Vac. Filter Stainless.
18"x28" Bird Continuous Stainless.
400 Sq. ft. U. S. Auto-Jet Filter Monel Screens (2).

COMPRESSORS—VACUUM PUMPS

Nash #9 Compressors 2150 CFM @ 16 PSI.
Worthington YO 1360CFM @ 35PSI; 150 HP.
Norwalk Hydrogen Comp. 5 CFM 15000 PSI.
Nash #4 Vacuum Pump 650 CFM @ 15".

STAINLESS STEEL TANKS

11500 gal. 12'x15x3/16" agit.
4500 gal. 6'x25'x1/4" dish/cone 25PSI coiled.
4000 gal. 8'x12'x3/16" dished coiled.
3500 gal. 8'x9'x5/16" dished heads.
1500 gal. 6'x6'9"x1/4" dished heads.
1200 gal. 5'x8'x1/4" Agitated.
750 gal. 4'6"x6'x1/4" dished 42 PSI.
500 gal. 4'x5'x5/16" dished heads.
500 gal. 4'x5'6"x1/4" flat Agitated.
(20) Tanks 50 to 400 gal. some agitated.

SPECIAL ITEMS

TRIPLEX PUMP—2¼x4 Stainless 2000 PSI.
CRYSTALLIZER Squire 40"x30" Agit. Jktd.
CRYSTALLIZER Buflovak 6' Vac. Jkt. Agit.
CRYSTALLIZER Swenson 24"x20' Jktd. SS.
AIR DEHYDRATOR—Anders 8FA Auto.
ABSORPTIVE DRYER—Kemp FEO2.S.
SIFTERS—30"x96"; 40"x84"; 60"x84" S.S.
SIFTER 48" Sweco-Triple Deck Mod. A9062.
CONVERTER—St. Wells 10'x29' 10000 Sq. ft.
FURNACE—St. Wells 1MM/BTU oil fired.
HEATER 150 KW Hot Oil Hynes Elec. Co.
MIXER 300 gal. B.P. Stainless Sigma 18Dim.
BLENDER Conical 6' Paterson 69 CF 10 HP.
BLENDER Conical 12' 500 CF SS clad.
EVAPORATOR—435 Sq. ft. Single Effect.
CENTRIFUGAL PUMPS—STAINLESS—
1" to 3" 10 to 750 GPM 35 to 100' Head.

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LIQUIDATIONS

CLEVELAND, OHIO

1—Raymond #73612 Super High Side 6-Roll Mill, with whizzer, cyclone, piping and motors.
1—Raymond #6669 Super High Side 6-Roll Mill, with whizzer, cyclone, piping and motors.
1—Raymond 12' dia. Double Whizzer Air Separator.
2—Sturtevant 14' dia. Air Separator.

1—Kilby Nickel Single Effect Force Feed Evaporator, 1200 sq. ft.
2—12,000 gal. Nickel Clad Tanks.
5—8,500 gal. Nickel Clad Tanks, some agitated.
1—1,000 gal. Nickel Clad Tank.
2—Oliver 5'3"x4' Nickel Clad Rotary Vacuum Salt Type Filters.
2—Pfaudler 300 and 200 gal Glass Lined Jkt. Agt. Reactors.
1—Sperry 30" C.I. Filter Press, 27 chambers.
1—Buflovak 32" x 90" Double Drum Dryer.
4—Feinc 8'x12' Rotary Vacuum Steel Filters, string discharge.
2—Peabody Gas Scrubbers stainless steel 11,000 CFM and 6,000 CFM at 145°F with fans, motors.
2—6'6" dia. x 60' Rotary Dryers.
1—5½' x 4½' x 50' Rotary Dryer.
1—5½' x 4½' x 60' Rotary Dryer.
7—Dorr 80' and 40' dia. Thickeners.
3—Vogt 387 sq. ft. Rotary Pressure Filters.
2—Chicago Pneumatic 26"x14" Vacuum Pumps with 150 HP motors.
3—Fuller Kinyon Pumps H5 and H6.
1—Link-Belt 24"x90' Troughing Belt Conveyor.
5—Nickel Centrif. Pumps, 2", 3".

GENEVA, NEW YORK

2—Vulcan 3'x20' 347 S.S. Packed Columns with 240 sq. ft. S.S. Heat Exchanger.
5—Stainless Steel Condensers 70 to 250 sq. ft.
6—Nash H5, L5 Vacuum Pumps 20 & 15 HP motors.
1—Nash L3 Stainless Vacuum Pump.
6—1200, 1000, 400 gals. 347 S.S. Tanks.
8—25,000 gal. Aluminum Storage Tanks ½" shell.
2—3000 gal. Aluminum Tanks, 7' x 11'.
1—Tolhurst 40" Centrifuge 347 S.S. imperforate basket, 15 HP.
1—Swenson Vertical 347 S.S. Single Effect Evaporator approx. 300 sq. ft. with accessories.
2—Banks Stainless Steel cooling coils, each bank having 24 - 2" tubes 20' long.
19—LaBour and Durco Stainless Steel Centrifugal Pumps 10-50 GPM.

BRILL FOR VALUES

CENTRIFUGES

3—Bird 18" x 28", 24" x 38" Solid Bowl Continuous 304 S.S.
1—Bird 40" x 60" Solid Bowl Continuous 316 S.S. UNUSED.
5—Sharples C-20 and C-27 Super-D-Hydrator 316 S.S.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Sharples #16, 304 S.S., 3 HP motor.
1—Tolhurst 40" 347 S.S. imperforate basket 15 HP UNUSED.

TANKS

25—500 to 3500 gal. Vertical 304 S.S. Tanks opened and closed, some agitated.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—1500 gal. Stainless Pressure Tank, 5' x 10', 90#.
1—2000 gal. Horizontal 304 S.S. Tank, 5' x 12'.
1—2500 gal. Vertical 304 S.S. Tank, 8' x 7'.
1—10,000 gal. Rubber Lined Tank, 10' x 17'6".
1—5500 gal. 316 S.S. Clad Pressure Tank 250 PSI.
1—12,000 gal. Horizontal Steel Pressure Tank. 7'6" x 36', 200 PSI.
5—25,000 gal. Aluminum Storage Tanks.

REACTORS—EVAPS—CONDS—COLS

1—Pfaudler 125 gal. 304 S.S. Jacketed Agitated Reactor, 150# int., 125# jacket.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
2—Pfaudler 850 and 650 gal. Steel Jacketed, Agitated Reacters.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—O. G. Kelly 3000 sq. ft. 309 S.S. force feed Evaporator UNUSED.
1—550 sq. ft. Buflovak monel single effect Evaporator.
10—Stainless Heat Exchangers: 910, 536, 370, 250, 131, 70 sq. ft.
1—4'6" x 46' 316 S.S. Clad Column, 250 PSI.
6—30" x 19' S.S. Packed Columns.
1—24" x 35' 304 S.S. Bubble Cap Column.

FILTERS

2—#10 Sweetland, 27 leaves 4" centers, 250 sq. ft.
1—#5 Sweetland 304 S.S., 120 sq. ft.
1—Oliver 6' dia. Horizontal 316 S.S.
1—Oliver 4' dia. Monel Horizontal.
1—Oliver 5' x 6' Steel Rotary Vac. Precoat.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet.
1—Hercules 400 sq. ft. 304 S.S. Pressure.
3—Oliver Precoat 5' x 6', 5' x 10', 8' x 10'.
1—Oliver 5'3" x 8' Steel Rotary Vac vaportite housing.
1—Feinc 3' x 1' 316 S.S. Rotary Vac.

DRYERS

1—Buflovak Vacuum Shelf, 17 - 60" x 80" shelves.
2—Buflovak 42" x 120", atmospheric double drum complete.
1—Buflovak 32" x 90" Atmos. Twin Drum.
2—Devine 4' x 9' single drum, atmospheric.
1—Buflovak 3' x 10' Rotary Vacuum.
1—Stokes 4' x 20', 304 S.S. Rotary Vacuum.
6—Louisville Rotary Steam Tube 5' x 6', 6' x 30', 6' x 50'.
2—Louisville 8' x 50' Stainless Steel lined Rotary.
3—Rotary Dryers 4' x 40', 6' x 50', 6' x 60', 7' x 80', 8' x 87'.
1—Louisville 4½' x 25' Inconel Rotary.
1—Link Belt 6'4" x 24" S.S. Louvre Dryer.
1—Stokes model 38-A Tray Dryer with 16 - 36" x 36" S.S. Shelves.
2—Atmos. Tray, 16 shelves, 40" x 24".
2—10' and 4' dia. 304 S.S. Spray Dryers.
2—Wyssmont, 304 S.S. 6'2" and 9'6" dia.

MIXERS

1—Sturtevant 75 cu. ft. 304 S.S. Rotary Batch Blender 20 HP.
1—Abbe 110 gal. 304 S.S. Jacketed Agitated Vacuum Dispersall Mixer.
2—Day Imperial 150 gal. jktd. double arm.
2—Baker-Perkins 150 and 100 gal jacketed double arm Sigma blades.
1—Baker-Perkins 50 gal. Jacketed.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel Jacketed Powder Mixers, 225 and 350 cu. ft.
1—1500# Powder Mixer 304 S.S.
1—3' dia. Simpson Intensive Mixer.
1—45" dia. Lancaster Mixer 7½ HP motor.
1—Patterson 80 cu. ft. Conical Blender, 304 S.S.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 1000 cfm, 10 microns, 15 HP.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
3—Mikro Pulverizers, 1SH, 1SI and Banton.
3—Abbe 2½" x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert. Mill, 10 HP.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#24 Rotex Sifters 20" x 64", 40" x 56".
5—Day Roball Sifters, 40" x 120", 40" x 84", Double Deck.
6—Nash H6, H5, H3 Vacuum Pumps.
3—Nash H6, 347 S.S. Vacuum Pumps.
4—Stokes Rotary Tablet Machines DD2-DDS2-DS3-RB2.

Partial List of Values — Send for Complete Details

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35-61 JABEZ STREET, NEWARK 5, N. J.

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LIQUIDATION
AMMONIUM SULPHATE PLANT
EL DORADO, ARKANSAS

3—20,000 gal. T316LC SS crystallizing tanks, 14' x 15', plus 11' cone bottom & 4' cone top. ⅜".
1—Link-Belt #900-30 Roto-Louvre rotary dryer, 9' dia. x 30' long.
1—Link-Belt 76" dia. x 14' long rotary cooler or contin. mixer.
1—3250 gal. T316LC SS tank, 6' dia. x 15'-10" high.
1—2250 gal. T316LC SS tank, 6' x 8' x 3/16", flat heads.
1—375 gal. T316LC SS tank, 4' x 4' x 3/16".
3—Worthington 4" x 3" Worthite cent. pumps, #3CG-1, 7½ HP.
1—New York Stainless Blower, #ME-300, 17,650 cfm @ 10.5" SP.
2—Link-Belt contin. bucket elevators; 40', 30' high C/C.

KETTLES — REACTORS

1—2000 gal. Glascote blue glass-lined reactor, jacketed, ASME 50 psi or vac. int., 90 psi jkt.
1—1800 gal. T316 SS jacketed reactor, 5 HP Agit.
3—1350 gal. T347 SS jkt. kettles, paddle Agit., Stainless cover.
1—1000 gal. T316 SS jkt. reactor, ASME vac. int., 65 psi jkt.
1—750 gal. T304 SS jkt. kettle, ASME 30 psi. 10 HP Agit.
1—600 gal. Bartlett & Snow Stainless crystallizing kettle.
6—465 gal. T304L SS reactors, 150 psi, internal, 165 psi jkt.
1—300 gal. Pfaudler blue G/L jkt. reactor, Agit., ASME.
1—300 gal. Glascote blue G/L jkt. reactor, Agit., ASME.

DRYERS

1—Buflovak 32" x 72" Twin-Drum Dryer, Chrome-Plated, Stainless Conveyors, Hoods, etc. Late Model!
5—Buflovak 42" x 120" Drum Dryers, ASME 160#.
1—American 42" x 120" dbl. Drum Dryer, ASME, stainless.
1—American 36" x 84" Dbl. Drum Dryer, ASME, Vacuum.
1—Buflovak 5' x 12' Single Drum Dryer, Vacuum.
1—Fischer 36" x 40" Single Drum Dryer.
1—Buflovak 32" x 52" Dbl. Drum Dryer, ASME 100# WP.
5—Stokes 195 sq. ft. Vacuum Shelf Dryers, #138J-16.
2—Davenport 8' x 60' Rotary Dryers, 7/16" Welded, Burners, Fans, etc.
1—Louisville 4'6" x 25' Rot. Steam-Tube Dryer, Welded.
1—Bartlett 3' x 15' Rotary Dryer, Everdur Shell.
1—Nerco-Niro Portable Stainless Spray Dryer.
1—7'6" x 62' Kiln, ½" welded shell.

FILTERS — CENTRIFUGALS

3—Sweetland #12 Pressure-Leaf Filters, (72) St. St. Leaves.
5—Shriver 48" Cast Iron Filter Presses, 1250 sq. ft.
6—Valley 36" Aluminum Filter Presses, 1000 sq. ft.
1—Niagara #510-28 T316SS Pressure Filter.
1—Oliver 5'3" x 8' Precoat Rot. Vacuum Filter—Unused.
2—Oliver 5'3" Precoat T316 SS Rot. Vacuum Filters.
10—Davenport Dewatering Presses; #1A, 2A, 3A.
25—Sharples #AS-16V Super Centrifugals, Inconel, Sludge Disch.
3—Sharples #C-20, C-27 Super-D-Hydrators, T316SS.
2—Sharples #16-P cent., T304SS, Pressuretite.
3—Bird 24" x 24", Monel Slotted-Bowl.
2—Bird 24" x 38", T304SS Conical Bowl, 25 HP.
1—Tolhurst 48" Susp. Cent., T304SS.
5—A.T.&M. 40" Susp. Cent., T304SS Solid, 40/5 HP.
2—A.T.&M. 32" Susp. Cent., T304SS Solid, 30 HP.
1—Fletcher 30" Junior, T304SS Extractor, Perf.
1—A.T.&M. 12" Susp. Cent., T304SS, Perf.

MIXERS — MILLS

50—Baker Perkins #17, 200 gal. Sigma Jktd. Mixers.
1—Baker Perkins #16-UUEM, 150 gal. Dispersion Mixer, 150 HP XP Motor, 125# Jacketed, Vaulted Cover.
1—Baker Perkins #15-UUMM, 100 gal. Dispersion Mixer, 100 HP, ASME Jacket, Cored Blades, Compression Cover, Motorized Tilt.
1—Baker Perkins #15, 100 gal. Disp. Mixer, T347SS, Jkt.
1—J. H. Day #6 Cinc., 100 gal., Sigma Blades, Stainless.
2—J. H. Day #5 Cinc., 75 gal. Sigma Blades.
1—Gemco 60 cu. ft. T304SS Conical Blender.
13—Abbe 6' x 8' Pebble Mills, Stone Lined, 30 HP.
2—Hardinge 7' x 36" Conical Pebble Mills.
1—Bonnot 5' x 10' Ball Mill, 75 HP.
1—Raymond 50", 5-Roller Hi-Side Mill, Oil Journals.
1—Raymond 66", 6-roller hi-side mill, 200 HP.

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MULTI-MILLION DOLLAR
LIQUIDATION
MAUMELLE ORDNANCE WORKS
N. LITTLE ROCK ARKANSAS

STAINLESS STEEL TANKS

6—13,300 gal. vert., 11'-10" dia. x 15'-7" high, conical top, 3/16" bottom, ⅛" top, 12 gal. top.
3—12,000 gal. vert., 11'-6" dia. x 15'-6" high, flat bottom, conical top, ¼" const.
18—11,500 gal. Pfaudler horiz. blue glass-lined, 8' x 30', ½" shell, dished heads, nickel coils.
18—3650 gal. vert., 10' x 7', closed, 3/16".
3—3000 gal. vert., T347 SS, 5' x 19', dished, ASME 60 psi.
60—1350 gal. horiz., T347 SS, 4' x 14', dished heads, ASME 60 psi, 38 sq. ft., int. coil, 3/16" shell, ¼" dished heads.
9—1300 gal. vert., T321 SS, 7' x 4'-6", closed.
3—1100 gal. vert., T347 SS, 4' x 11', dished, ASME 60 psi.
27—476 gal. vert., 4'-6" x 4', open top.
54—475 gal. vert., 5'-6" x 2'-6", open top, dished bottom.
27—445 gal. vert., 6' x 2', open top, dished bottom.
3—300 gal. vert., T347 SS, 4' x 3', ASME 60 psi.
9—285 gal. vert., 41" x 49", open top.
9—260 gal. vert., 40" x 48", closed.

KETTLES—REACTORS

72—Pfaudler 1400 gal. blue glass-lined kettles, 84" x 54", jacketed, open top, Stainless cover, 3 HP Agit.
18—Pfaudler 1250 gal. blue glass-lined jacketed reactors (Sulphonators), 72" x 72", closed heads, Agit, condenser.
54—Pfaudler 600 gal. Stainless jkt. crystallizing kettles.
72—Pfaudler 250 gal. blue G/L kettles, jkt., Stainless cover.

COMPRESSORS—BLOWERS

3—Worthington 3500 cfm air comp., #LTC-4, 500 HP gas drive.
1—Chi.-Pneu. 3026 cfm air comp., #19-32-30—18 x 24, steam driven.
3—Elliott 11,620 cfm turbo-blowers, #0, 125 HP.
18—Ing.-Rand #67D9 air comp., 6 x 6 x 5, type 30, 10 HP.
9—Spencer Stainless turbo-blowers 1200 cfm @ 3.5 oz., 3 HP.
40—Stainless blowers & fans, 24" to 42" dia.

BOILERS—HEAT EXCHANGERS—COLUMNS

3—Edgemoor 43.5 HP, 3000 cfm waste-heat boilers, ASME 250 psi.
5—Comb. Eng. 435 HP water-tube boilers, 300 psi, gas or oil fired.
6—1450 sq. ft. T347 SS vert. tubular gas condensers.
3—1000 sq. ft. Duriron Single-Pipe coolers or condensers.
3—564 sq. ft. T347 SS vert. tubular gas condensers (Ammonia burner-preheater), ASME 60 psi.
9—400 sq. ft. T304 SS pipe coolers, 2" ips sch. 40 pipe.
12—Amer. Spiral heat exchangers: 162, 73 sq. ft., T316L SS.
48—Duriron pipe coolers, open or jacketed: 170, 120, 110, 55, 50, 10 sq. ft.
16—Duriron 24" x12' packed columns.
1—24" x 33' Duriron & Stainless packed column.
3—18 sq. ft. Steel ammonia evaporators.

STEEL PRESSURE TANKS

9—28,000 gal. horiz. 11' x 38', dished, ASME 75 psi, some lined with lead & Acid-Proof brick.
2—11,000 gal. horiz., 8' x 27', dished, ASME 300 psi.
5—9000 gal. horiz., 8' x 24', ½" shell & dished heads.
54—5200 gal. horiz., 6' x 24', ½" shell & dished heads.

MISCELLANEOUS

25—Worthington 3" x 2" Worthite pumps, #2-CG-2B, 15 HP.
81—Worthington 2" x 1½" Worthite pumps, #1½-CG-1A, 5 HP.
35—LaBour 2" self-priming St. St. pumps, #15-DPL.
8—Graver 10' x 23' lead-lined concentrating drums, w/furnace, etc.
4—Cottrell 88 tube elec.-mist precipitators.
4—2800 gal. vert. Haveg tanks, 7' x 10', open.
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1—2000 gal. stainless steel jacketed reactor.

1—Patterson-Kelley 1000 gal. stainless steel jacketed reactor.

1—300 gal. Hastelloy "B" jacketed pressure reactor.

1—10,000 gal. horizontal rubber lined storage tank.

1—Allis Chalmers stainless steel rotary dryer, 6' x 50'.

2—Louisville 8' x 50' stainless steel rotary dryers.

1—Stokes double drum dryer, 5' x 12'.

1—Tolhurst 48" Batch-O-Matic centrifuge, stainless steel.

1—AT&M 26" type 316 stainless steel suspended type centrifuge, complete.

1—Glascote Series HR 1000 gal. glass lined jacketed reactor, complete with impeller type agitator, baffle and drive.

5—Tolhurst 40" and 30" rubber covered centrifuges.

1—Sharples type 316 stainless steel Super-D-Canter, PN-14, complete.

1—Sharples type 316 stainless steel centrifuge, Model D-2.

1—Sharples Model C-27 Super-D-Hydrator, MONEL.

2—Oliver stainless steel rotary filters, 3' x 2' and 3' x 4'.

12—Sweetland #12 pressure leaf filters with 72 stainless steel leaves.

1—Stokes stainless steel granulator, Model 43B.

1—Sturtevant #7 Dustite rotary batch blender, NEW.

1—Pfaudler Thimble type glass lined condenser, 62 sq. ft.

15—Robinson type 304 stainless steel horizontal blenders, 255 cu. ft.

1—Robinson type 304 stainless steel horizontal blender, 125 cu. ft.

1—Patterson-Kelley stainless steel twin shell blender, 2 cu. ft.

1—Stokes Model RDS 3 tablet press.

1—Williams "Comet" 4 roll mill, complete.

1—Raymond 2 roll high side mill.

1—Vulcan stainless steel bubble cap column, 4' dia. x 25 plates.

1—Griscom Russell stainless steel heat exchanger, 900 sq. ft.

3—Badger stainless steel heat exchangers, 500 sq. ft. and 600 sq. ft.

1—Struthers Wells stainless steel 1150 sq. ft. single effect evaporator.

1—Pfaudler glass lined jacketed vacuum receiver, 750 gal.

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Day 75 gal. sigma arm Mixer, 7½ HP motor
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CENTRIFUGE—Tolhurst 20", 40" Rubber Lined
CENTRIFUGE—Western State 36", underdriven, bottom discharge, 316 S.S., 2 speed, 10 HP, XP.

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3—Stainless Steel Receivers 50 to 100 gals.
5—Stainless Steel Tanks 75 to 300 gals.
9—Stainless Steel Jack Kettles 40 to 200 gals.
1—Day Stainless Spiral Blender 2000# cap.
4—Day Spiral Blenders 400 & 2000#.
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1—Patterson S.S. Gyro Sifter 20" x 48".
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1—Kent 13" x 32" High Speed Mill.
1—Pfaudler 800 gal. G. L. Jack. Kettle w/Ag.
3—Day 40 gal. Pony Mixers, M.D.
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Synchem, Biocide Producer, Organized in Camden, N. J.

R. M. Hollingshead Corporation and M. Sittenfield & Associates have formed Synchem Corporation, with offices at 840 Cooper Street, Camden, N. J.

Synchem will engage in research, development, and marketing of chemical biocides and other chemical specialties, based on reportedly unique patented quaternary ammonium compounds.

The materials are characterized by exceptional biocidal activity and sweet flavor, Synchem says. The use of everyday products, such as toothpaste, mouthwash, roomspray, and shampoo can be "tremendously enhanced" by the addition of these products, the company adds.

Industrial fields, such as paints, pulp, and film, are said to represent a further extension of the new corporation's sales possibilities.

British American Eyes

—Continued from page 5

American Oil is now working on plans to move its product abroad, Mr. Loughney indicated.

British American Oil is a 60-percent-owned Canadian affiliate of Gulf Oil Corporation. In 1953 it went on stream with the world's first high-purity cumene plant.

Recently the company started up a $2.5 million aromatics extraction plant at Montreal—capable of producing 6 million gallons of benzene yearly.

The benzene is used for cumene, which is converted into phenol and acetone at a nearby petrochemicals plant operated by B.A.-Shawinigan, Ltd., in which British American has an interest.

7—Baker Perkins 100 gal., 2 arm sigma—jacketed roller bearings—hyd. tilt.

1 — Readco — 1 gal. S.S. jacketed, double sigma.

1—Baker Perkins—2½ gal. S.S. jacketed—2 arm naben.

1—Day Imperial—150 gal. screw tilt—double sigma.

MACHINECRAFT CORP.
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 3-7634

Glycerol Guaiacolate Added To Heyden Newport's Line

Heyden Chemical Division of Heyden Newport Chemical Corporation, has added glyceryl guaiacolate—an expectorant and antitussive ingredient for cough and decongestant medicines — to its line of guaiacol products.

Glyceryl guaiacolate is said to be gaining use in both prescription and proprietary cough medicines. It is reportedly effective at low dosage levels without undesirable side effects.

Its solubility and compatibility permit ready incorporation and compounding with other medications, the company says.

DuPont-GM Case

—Continued from page 5

cases in that the profits from the stock dividends would be handled under the tax laws.

Prior bills would permit duPont stockholders to value the GM stock at its original cost to duPont (a little more than $2 a share). They would pay a capital gains tax on the increase in value when the stock is sold.

The new proposal regards the GM stock distribution as a return of capital rather than a dividend distribution and the stockholder would be taxed on the amount received in excess of his original investment.

For example, stockholder A owns a single share of duPont stock for which he paid $100. In a distribution pursuant to the terms of an antitrust order he receives one and one-third shares of GM stock worth $60.

Because of the distribution, his basis for the duPont stock ($100) is reduced by the fair market value of the GM stock received ($60), so that after the distribution his basis for the duPont stock is $40 ($100 minus $60).

In this instance, the stockholder would owe no tax upon receipt of his stock dividend, but if he later sells the GM stock, his gain is computed using the remaining $40 basis for that stock.

On the other hand, stockholder B owns a single share of duPont stock for which he paid $40. In a distribution, he receives one and one-third shares of GM stock worth $60.

Since the fair market value of the distribution is more than his entire basis, all of his basis is wiped out by the distribution and the amount in excess of the basis ($20) is recognized as a gain, subject to the capital gains tax.

Foreign Guarantee Plan Heading for Stormy Seas

Administration plans to expand its program of guaranteeing overseas investments—an important part of the foreign aid program—are running into congressional difficulties.

The senate foreign relations committee last week called for a limitation on the coverage of proposed all-risk guarantees to investments connected with social betterment rather than commercial enterprises.

It had been proposed originally that the government be permitted to guarantee certain high-priority overseas investments against all risks, up to a total of $100 million of investments.

This is in addition to the present guarantee program for commercial investments against expropriation, limitations of exchange conversion, etc.

The arguments advanced for the all-risk guarantee is that they could serve as a substitute for foreign aid loans.

To meet criticism of the senators, the State Department modified the original scheme to eliminate guarantees against frauds and mismanagement and to limit the program to risks that normally could be insured by private sources.

SunOlin Names Collier PA

Harry A. Collier has been named purchasing agent for SunOlin Chemical Company, with headquarters at Claymont, Del., where SunOlin operates a urea plant and is constructing plants for ethylene and ethylene oxide.

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110 dms, Sandoz Inc, Hamburg
36 dms, Carbic Hoechst Corp, Rotterdam
12 dms, C Hardy, Havre
46 dms, Rotterdam
ANTIMONY OXIDE—500 bgs, Indussa Corp, Antwerp
ARABIC GUM—410 bgs, Bank of N Y, Port Sudan
257 bgs, Irving Trust Co, Port Sudan
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BEESWAX—25 bgs, Machado & Co, Puerto Plata
50 bgs, Cornelius Wax Refining Corp, Puerto Plata
28 bgs, Baldini & Co, Tampico
294 blks, Lobito
207 bgs, Djibouti
50 bgs, Puerto Plata
34 bgs, Tampico
BERGAMOT OIL—25 qu cs, Magnus Mabee & Reynard, Messina
BLANC FIXE PULP—32 cs, C J Osborn Co, Rotterdam
BLOOD, WHOLE, DRIED—300 bgs, Myers Sales Corp, Copenhagen
CALCIUM CYCLAMATE—20 dms, Yokohama
CALCIUM PHOSPHATE, DIBASIC—600 bgs, Wessel Duval & Co, Antwerp
CANDELILLA WAX—188 bgs, Frank B Ross, Tampico
250 bgs, Smith & Nichols, Tampico
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106 bgs, Hamburg
CASSIA—1,518 bls, Rotterdam
CASTOR OIL—150 tons, Wallace & Tiernan, Rio de Janeiro
225 tons, Wallace & Tiernan, Fortaleza
297 tons, Irving Trust Co, Fortaleza
300 tons, Woodward & Dickerson, Salvador
250 tons, Baker Castor Oil Co, Salvador
250 tons, Salvador
645 tons, Santos
CHALK—600 bgs, Pluess Staufer, Antwerp
CHLORINATED RUBBER—610 bgs, Chemical Manufacturing Co, Liverpool
CHOLINE CHLORIDE—1,116 bgs, Fallek Products Co, Liverpool
COCA LEAVES—289 bls, H Bruckmann & Lorbacher, Matarani
136 bls, H Bruckmann & Lorbacher, Salverry
COCONUT OIL—1,520 tons, American Trust Co, Cebu
938 tons, Manila
COD OIL—74 tons, Bowring & Co, St Johns
COPAIBA BALSAM—16 dms, Lo Curto & Funk, Manaus
8 dms, J M Rodrigues, Manaus
COPAL GUM—160 bgs, S Winterbourne & Co, London
CORN OIL—420 tons, Corn Products Co, Rotterdam
CORN STARCH—1,100 bgs, Capetown
CUMIN SEED—360 bgs, Am-Iran Corp, Khorramshahr
DAMMAR GUM—50 cs, O G Innes Corp, Bangkok
50 cs, S Winterbourne & Co, Bangkok
140 bgs, Geismar & Co, Singapore
70 bgs, Wm H Scheel, Singapore
70 bgs, O G Innes Corp, Singapore
DEGRAS—194 dms, Malmstrom Chemical Corp, Fremantle
56 dms, Crystal Extract & Chemical Co, Fremantle
54 dms, Silvey Shipping Co, Fremantle
22 dms, N I Malmstrom, Rotterdam
55 dms, N I Malmstrom, Fremantle
17 dms, Traders Service Corp, Manchester
5 dms, Olympic Shipping Co, Liverpool
6 dms, Charles of the Ritz, Bremen
DILL SEED—255 bgs, M J Golombeck, Bombay
EUCALYPTOL—25 dms, Seville
EUCALYPTUS OIL—2 dms, Colgate Palmolive Co, Santos
GARLIC OIL—8 cs, Magnus Mabee & Reynard, Kobe
GELATIN—108 dms, D H Burdett, Liverpool
460 bgs, T M Duche & Sons, Antwerp
3 bbls, Riches Nelson, Antwerp
100 bgs, Bank of NY, Copenhagen
GERANIUM OIL—4 bbls, Magnus Mabee & Reynard, Marseille
10 bbls, Marseille
GHATTI GUM—55 bgs, P A Dunkel, Bombay
GINGER—80 bgs, Wm E Martin & Sons, Cochin
499 bgs, Freetown
GINGER ROOT—137 bgs, Coral Island Trading Co, London
GYPSUM, CRUDE—31,242 tons US Gypsum Co, Hantsport
HYDROGEN PEROXIDE—17 cs, Rotterdam
IODINE, CRUDE—464 kgs, Chilean Nitrate Sales Corp, Tocopilla
IRON BLUE—56 dms, Van Oppen & Co, Liverpool
KARAYA GUM—125 bgs, Colony Import & Export Corp, Bombay
182 bgs, Stein Hall & Co, Bombay
433 bgs, Block Drug Co, Bombay
62 bgs, Nehls & O'Connell, Bombay
120 bgs, Jacques Wolf Bombay
122 bgs, Morningstar Paisley Inc, Bombay
LACTOSE—100 dms, Rotterdam
LAVANDIN OIL—20 cs, Marseille
LEMON OIL—6 dms, Fritzsche Bros, Vera Cruz
1 dm, Felton Chemical Co, Vera Cruz
6 dms, Dodge & Olcott, Vera Cruz
2 dms, Ungerer & Co, Vera Cruz
80 cs, Fritzsche Bros, Messina
LEMONGRASS OIL—10 dms, Fritzsche Bros, Cochin
LIME OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
3 dms, Dodge & Olcott, Tampico
LITHARGE—184 dms, Eagle Picher Co, Tampico
LOGWOOD EXTRACT—4 dms, American Dyewood Co, Glasgow
MAGNESITE—1,000 bgs, Cochin
MAGNESIUM CARBONATE—400 bgs, Reheis Co, Liverpool
MANGROVE BARK—1,480 bgs, Barkey Importing Co, Kilwa-Mosoko
MENTHOL—50 cs, Kane Import Corp, Santos
150 cs, Lo Curto & Funk, Santos
100 cs, Fritzsche Bros, Santos
75 cs, Schwabach & Co, Santos
250 cs, American Far Eastern Syndicate, Santos
50 cs, National City Bank, Muroran
50 cs, J Manheimer, Muroran
MERCURY—40 flks, Lo Curto & Funk, Tampico
METHYLENE CHLORIDE—20 dms, Genoa
2-METHYLNAPHTHALENE—50 dms, G A Abood Co, Rotterdam
MONOCHLOROACETIC ACID—160 dms, Bremen
MUSTARD SEED—580 bgs, Old Dutch Mustard Co, Aarhus
MUSTARD SEED OIL—10 cs, Schimmel & Co, Hamburg
MYRABOLAM EXTRACT—200 bgs, Tanimex Corp, Liverpool
NAPHTHALENE—1,000 bgs, Ore & Ferro Corp, Rotterdam
117 dms, Ore & Ferro Corp, Rotterdam
1,334 bgs, Gallard Schlesinger, Hamburg
2,662 bgs, J N Forker, Liverpool
1,187 bgs, Witco Chemical Co, Liverpool
2,857 bgs, M W Hardy & Co, Rotterdam
3,100 bgs, United Mineral & Chemical Corp, Gdynia
3,500 bgs, Gdynia
1,000 bgs, Antwerp
NIACIN—10 kgs, D Hauser, Gothenburg
NICKEL ACETATE—20 dms, Philipp Bros Chemicals, Hamburg
OITICICA OIL—100 tons, Brazil Oiticica Inc, Fortaleza
OLEORESIN PAPRIKA—7 dms, Lo Curto & Funk, Alicante
OLIVE OIL—100 dms, Strohmeyer & Arpe, Seville
50 dms, Manufacturers Trust Co, Seville
50 dms, Swiss Credit Bank, Seville
150 dms, Atlantic Bank of N Y, Seville
96 dms, National City Bank, Seville
100 dms, Unanue & Sons, Seville
ORANGE PEEL—119 bls, Meer Corp, Alicante
OSSEINE—672 bgs, Chalmers Gelatine Co, Antwerp
OURICURY WAX—45 bgs, Cornelius Wax Refining Corp, Salvador
50 bgs, M Schmidt, Salvador
111 bgs, Rotterdam
PALM OIL—264 tons, Ango Ango
736 tons, Matadi
PALM KERNEL OIL—340 tons, E F Drew & Co, Matadi
398 tons, Matadi
PAPAIN—239 cs, Bemo Shipping Co, Mombasa
PAPRIKA—25 bgs, J H Elton, Alicante
50 bgs, Pepper Products Co, Alicante
PATCHOULI OIL—30 cs, Tombarel Products Corp, Penang
PEARL PIGMENT—12 cs, D Hauser, Kobe
PECTIN—105 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—280 bgs, A G Dunn, Singapore
320 bgs, A G Dunn, Cochin
160 bgs, East India Trading Co, Cochin
80 bgs, Otto Gerdau, Cochin
160 bgs, Mutual Spice Co, Cochin
640 bgs, Internatio Rotterdam, Cochin
240 bgs, Cochin
210 bgs, Singapore
PEPPER, WHITE—70 bgs, A G Dunn, Singapore
PINENEEDLE OIL—2 bbls, Lo Curto & Funk, Hamburg
POLLACKLIVER OIL—50 dms, Mitsubishi Corp, Yokohama
POPPYSEED—200 bgs, Louis Furth, Rotterdam
300 bgs, Rotterdam
POTASH, CAUSTIC—144 dms, B T Chemco Inc, Gothenburg
POTASSIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
150 cks, Ucine Industries, Havre
POTASSIUM FERRICYANIDE—200 bbls, Atlantic Raw Materials, Hamburg
POTASSIUM NITRATE—200 bgs, C Lievense, Dunkirk
PSYLLIUM SEED, HUSKS—1,163 bgs, Foodline Inc, Bombay
PYRETHRUM EXTRACT—68 dms, Mombasa
QUEBRACHO EXTRACT—2,095 bgs, First National Chicago, Buenos Aires
938 bgs, International Products Corp, Buenos Aires
2,309 bgs, Tan American Corp, Buenos Aires
QUINCE SEED—22 bgs, Khorramshahr
RAFAELITE—100 bgs, C A Redden, Liverpool
RARE EARTH FLUORIDE—17 dms, Ronson Metals Corp, Bremen
RESIN, NATURAL—140 bgs, S Winterbourne & Co, Singapore
RICE STARCH—300 bgs, Manhattan Adhesives Corp, Trieste
RUTILE SAND—4,000 bgs, Metal Traders Inc, Brisbane
SACCHARIN—40 dms, Chemical Bank, Yokohama
SAFE FLAVES—80 bls, London
SANDALWOOD OIL—9 cs, Ungerer & Co, Cochin
5 cs, International Flavors & Fragrances Inc, Cochin
SEAWEED MEAL—274 bgs, Hinton & Co, Dublin
SEEDLAC—200 bgs, Mantrose Corp, Calcutta
SESAME SEED—100 bgs, Alexandria
SODIUM ALGINATE—101 dms, Edward & Co, Havre
22 dms, Olympic Shipping Co, Bremen
10 cs, Henley & Co, Glasgow
10 dms, T M Duche & Sons, Glasgow
SODIUM CYANIDE—240 dms, American Cyanamid Co, Liverpool
800 dms, Chemical Manufacturing Co, Liverpool
SODIUM FERROCYANIDE—400 bgs, Filo Color & Chemical Corp, Antwerp
SODIUM HYDROSULFITE—100 dms, Toms River Chemical Corp, Rotterdam
SODIUM LAURYL SULFATE—40 kgs, Liverpool
SODIUM SILICOFLUORIDE—550 bgs, Copenhagen
SPERMACETI—100 cs, Strohmeyer & Arpe, Liverpool
STEATITE—90 bgs, Hammill & Gillespie, Madras
SULFAMIC ACID—220 bgs, H Bruckmann & Lorbacher, Dunkirk
SULFATHIAZOLE—100 bbls, American Roland Corp, Gdynia
SULFUR, CRUDE—3,647 tons, Pan American Sulfur Co, Coatzacoalcos
TANNING EXTRACT—11,460 bgs, Karl Schroff, Fremantle
TAPIOCA FLOUR—4,032 bgs, Morningstar Paisley Inc, Kohsichang
1,972 bgs, Geismar & Co, Kohsichang
40 bgs, American Metagraph Co, Santos
TARTARIC ACID—1,300 bgs, Leonhardt & Brush, Barcelona
THALLIUM SULFATE—2 cs, Hudson Shipping Co, Bremen
TRAGACANTH GUM—50 bgs, J H Schroder, Khorramshahr
91 bgs, Am-Iran Corp, Khorramshahr
571 bgs, Khorramshahr
TURMERIC—57 bgs, C Czarinkow, Madras
ULTRAMARINE BLUE—20 bgs, Whittaker Clark & Daniels, London
ULTRAMARINE ROSE—40 dms, Whittaker Clark & Daniels, London
40 bgs, Whittaker Clark & Daniels, London
ULTRAMARINE VIOLET—40 dms, Whittaker Clark & Daniels, London
UREA—1,000 bgs, Chemical Manufacturing Co, Liverpool
551 bgs, Rotterdam
VANILLA BEANS—16 cs, F Huber & Co, Vera Cruz
VINYL COPOLYMERS—180 cs, Liverpool
40 dms, London
WATTLE EXTRACT—3,053 bgs, Barkey Importing Co, Mombasa
1,490 bgs, Elkan River Plate Corp, Mombasa
YACCA GUM—147 bgs, Reichold Chemicals Inc, Port Adelaide
152 bgs, Port Adelaide
ZINC CHLORIDE—42 dms, Riches Nelson, Antwerp
ZINC YELLOW—200 bgs, Revelli Chemical Co, Antwerp
ZIRCON SAND—6,000 bgs, Metal & Thermit Corp, Brisbane

Philadelphia

ADIPIC ACID—500 bgs, Bremen
ASBESTOS FIBER—1,500 bgs, Lourenco Marques
BONEMEAL—1,000 bgs, Rijeka
1,000 bgs, Calcutta
4,742 bgs, Bombay
CASEIN—1,000 bgs, Buenos Aires
833 bgs, Antwerp
FERROUS SULFATE—30 dms, Frank Samuel & Co, London
FISHLIVER OIL—60 dms, Hanover Bank, Yokohama
GYPSUM—200 bgs, Hammill & Gillespie, Liverpool
MANGROVE EXTRACT—600 bgs, Saxe Cutch Corp, Singapore
NAPHTHALENE—4,554 bgs, Rotterdam
835 bgs, Antwerp
POTASSIUM BICARBONATE—545 bgs, French Potash & Import Co, Antwerp
QUEBRACHO EXTRACT—360 bgs, Barkey Importing Co, Buenos Aires
SODIUM ANTIMONATE—500 bgs, Pigment & Chemical Co, Hamburg
SODIUM BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM SILICOFLUORIDE—600 bgs, Riches Nelson, Rotterdam
SULFUR, CRUDE—10,300 tons, Dixon Chemical & Research Co, Coatzacoalcos
TAPIOCA FLOUR—9,632 bgs, Kohsichang
ZINC OXIDE—2,000 bgs, Pigment & Chemical Co, London

Current Market Quotations

—Continued from page 32

Xylene, petroleum, indust., tanks, f.o.b. works:			
Bayonne, N. J.	gal.	.29	—
Baytown, Tex.	gal.	.27	—
Charleston, S. C.	gal.	.29	—
Chicago, Ill.	gal.	.28½	—
Detroit, Mich., dlvd.	gal.	.27½	.29
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29	—
Providence, R. I.	gal.	.30	—
Sewell's Point, Va.	gal.	.28	—
Wood River, Ill.	gal.	.28½	—
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif.	lb.	.21	—
dms., l.c.l., f.o.b., Richmond, Calif.		.22	—
tanks, frt. alld.	lb.	.19	—
o-Xylene, dms., c.l., works	lb.	.06	—
dms., l.c.l., works	lb.	.09	—
tanks, works	lb.	.06	.06½
p-Xylene dms., c.l., works	lb.	.20	—
dms., l.c.l., works	lb.	.21	—
tanks, frt alld	lb.	.1645	—
Xylenol, cryst., 45°-47°C., m.p., dms., l.c.l., works, frt. equald basis	lb.	.23	—
56°-58°C., m.p., dms., l.c.l., works, frt. equald basis	lb.	.33	—
60°-62°C., m.p., dms., l.c.l., same basis	lb.	.40	—
Xylenol fraction b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal.	1.25	—
dms., l.c.l., same basis	gal.	1.30	—
tanks, same basis	gal.	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal.		1.35	—
dms., l.c.l., same basis	gal.	1.40	—
2,4-Xylidine, tech., dms., frt. alld	lb.	1.15	—
2,5-Xylidine, tech., dms., frt. alld.	lb.	1.20	—
Xylidines, mixed o-m-p, dms., c.l., or t.l., works	lb.	.39	—
dms., l.c.l., same basis	lb.	40	—
tanks, same basis	lb.	.38	—

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene

Y

Yara yara oil, ens.	lb.	2.15	3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd	lb.	.27	—
Yeast, primary, USP XV, 1.0 mcg. B_1 per gram, 100-lb. dms	lb.	.47	—
USP XV, 270 mcg. B_1 per gram, 100-lb. dms	lb.	.53	—
primary, USP, XV, 300 mcg., B_1 per gram, 100-lb. dms	lb.	.56	—
USP XV, 600 mcg. B_1 per gram, 100-lb. dms.	lb.	.60	—
Torula, USP, dlvd	lb.	18	—

YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls	lb.	40	45
Ylang Ylang oil, Bourbon, bots	lb.	7.00	22.00
extra, bots	lb.	24.00	33.00
Yohimbine hydrochloride, bots, tins	oz.	3.75	4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works	lb.	.37	—
50-lb. bgs., smaller lots, f.o.b. works	lb.	.41	.44
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., l.t.l., works	lb.	.2950	—
Zinc borate bgs, 1,000 lbs or more, works	lb.	.25	—
bgs, less than 1,000 lbs., same basis	lb.	.27	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech., soln., 50%, dms., c.l., works 100 lbs		5.80	—
dms., l.c.l., works 100 lbs		6.40	—
tanks, works 100 lbs		5.15	—
fused, dms, c.l., works 100 lbs.		10.70	—
dms, l.c.l., works 100 lbs.		11.20	—
Tech., gran., fib, dms., c.l., work 100 lbs.		11.45	—
fib, dms, l.c.l., works 100 lbs.		11.95	—
Zinc chromate, bbls, dlvd	lb.	.29	—
Basic, bbls, dlvd	lb.	.34	—
Zinc cyanide, dms, 1,000-lb. lots or more, works	lb.	.55	—
dms, smaller lots, works	lb.	.57	—
Zinc dust, coml, bbls., c.l., works	lb.	.16	—
Pigment, bbls., c.l., works	lb.	.15½	—
bbls., l.c.l., works	lb.	.17¼	—
Zinc fluoride, bbls, works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms, l.c.l, frt alld	lb.	.23½	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.11½	—
Prime western slabs, New York	lb.	.12	—
Zinc naphthenate liq. 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn. dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., flake, 100-lb. fib dms., l.c.l.	lb.	.16½	—
300-lb fib dms, l.c.l.	lb.	.14½	—
300-lb fib dms, c.l.	lb.	.14	—
Zinc oxide pigment, American process, lead-free bgs., c.l., f.o.b works	lb.	.12½	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.13	—
bgs., l.c.l., smaller lots, same basis	lb.	.13½	—
Zinc oxide, leaded, 35%, bgs., c.l., mills, f.o.b works	lb.	.14	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.14½	—
pigment, American process, leaded, 50%, bgs., l.c.l., 10 tons or more, same basis	lb.	.14½	—
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b. works	lb.	.14½	—
bgs, l.c.l., 10 tons or more, same basis	lb.	.15	—
Zinc oxide, French process, green seal bgs, l.c.l, smaller lots, same basis	lb.	.14½	—
red seal, bgs, c.l, same basis	lb.	.14	—
Zinc oxide, French process, white seal, bgs, l.c.l, 10 tons or more, same basis	lb.	.15	—
bgs, l.c.l, smaller lots, same basis	lb.	.15¼	—
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¾	—
bgs, l.c.l., 10 tons or more, same basis	lb.	.15½	—
bgs, l.c.l, smaller lots, same basis	lb.	.15¾	—
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld.	lb.	.15¼	—
50 lb.-dms., l.c.l., 10 tons or more, same basis	lb.	.16¼	—
50 lb.-dms., l.c.l., smaller lots, same basis	lb.	.16¾	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	.48
NF, powd, dms	lb.	.48	.49
Zinc resinate, precip, 7.2-7.6% Zn., dms., frt. alld	lb.	.45	—
Zinc silicofluoride, dms, works	lb.	.13½	.14
Zinc stearate USP, etns., c.l.	lb.	.41	—
etns, l.c.l.	lb.	.43	.46
Zinc sulfate, powd., monohydrate, 36% Zn, bgs, c.l., dlvd E	100 lbs.	8.00	—
bgs., l.c.l., dlvd, E	100 lbs.	9.00	—
Zinc sulfate in bbls 40c higher			
Zinc sulfide, pure, bgs, c.l., dlvd	lb.	.2530	—
Zinc undecylenate, 75-lb fib, dms., f.o.b works	lb.	2.04	—
Zinc, yellow (see Zinc chromate)			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls, c.l., works	100 lbs.	10.85	—
bbls, l.c.l, works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt alld	lb.	.26	—
Normal, 250-lb dms., frt. alld	lb.	.55	—
Zircon (G) gran, bgs, c.l, works	lb.	.03½	—
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅝	—
bgs., 1 ton to 9,999-lb lots, works	lb.	.04	—
bgs., smaller lots, works	lb.	.06½	—
Zircon (G) milled, bgs, c.l., works	lb.	.04½	—
bgs, 5 tons to c.l., works	lb.	.04⅝	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	—
bgs, 500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms, c.l, 30,000 lbs min., works	lb.	.23	—
Zirconium hydride powd, electronic grade, dms, works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls or bgs, works	lb.	1.50	—
Electric-fused lump, bgs, 500 to 1,999-lb lots, works	lb.	.48½	—
bgs, smaller lots, works	lb.	.51	—
milled bgs, c.l., works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs, 500 to 1,999-lb lots, works	lb.	.64	—
bgs, smaller lots, works	lb.	.66	—
Glass polishing grade, 94-97% ZrO_2, bgs, works	lb.	.55	.65
Opacifier grade 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide 91% ZrO_2, milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst, etns., 5-ton lots, works	lb.	.37½	—

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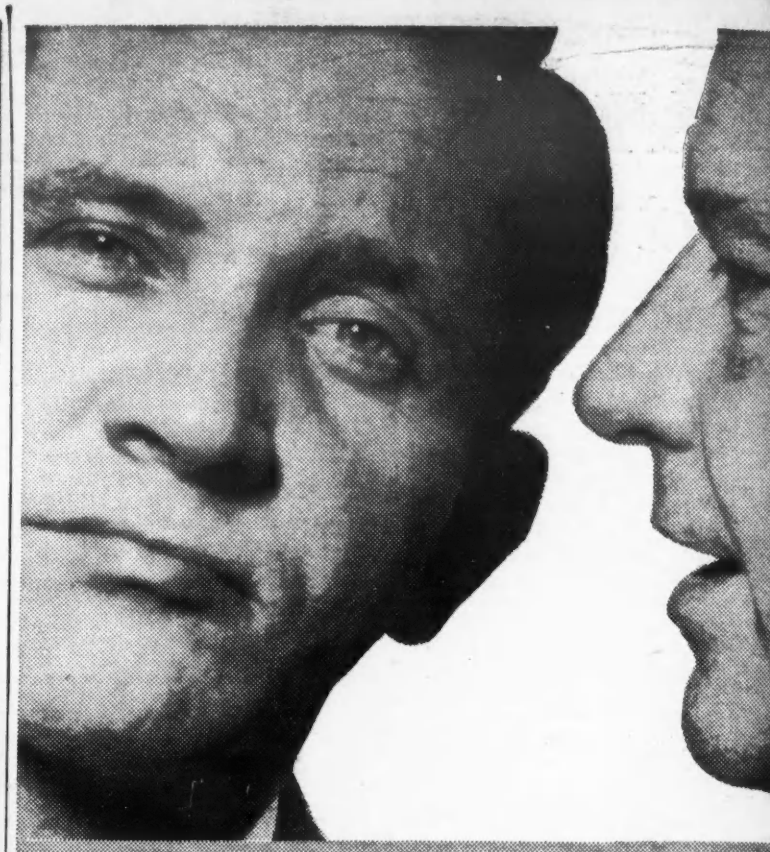

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